

MOUNTAIN RIDGE ROAD BRIDGE

MOUNTAIN RIDGE ROAD, NEW BEITH

FOR 'FRASERS PROPERTY AUSTRALIA'

DRAWING LIST

EARTHWORKS, ROADWORKS AND DRAINAGE	
20-0181-500	COVER PLAN
20-0181-501	GENERAL NOTES
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20-0181-504	SURVEY SETOUT AND KERB TYPES LAYOUT PLAN
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LOCALITY PLAN
SCALE 1:5,000 (A1)
SCALE 1:10,000 (A3)

PROJECT INFORMATION SUMMARY:	
No. OF LOTS = N/A	
AREA OF SITE = 5.737 ha	
RP DESCRIPTION	
LOT 4 ON SP 332712	
LOT 10 ON RP 174046	
LOT 31 ON RP 143361	
DATUM LEVEL AND LOCATION	
PM186068	
RL 45.630 AHD	
LOCATED	
FLAGSTONE	
LOCAL AUTHORITY: LOGAN CITY COUNCIL	
COUNCIL REFERENCE NUMBER: OW/169/2023	

NOTE:	
THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH:	
- VEGETATION MANAGEMENT PLAN	
- LANDSCAPE ARCHITECT'S PLANS	
- ELECTRICAL, COMMUNICATIONS AND GAS CONSULTANT'S PLANS	
- SEDIMENT AND EROSION REPORT	
- SAFETY IN DESIGN REPORT	
- PITT & SHERRY BRIDGE DESIGN DRAWINGS P.22.0175-STR-DRG-001 TO 058	
- DESIGN FLOW STORMWATER MANAGEMENT PLAN 'NEW BEITH - MOUNTAIN RIDGE ROAD EXTENSION - EAST'	
- DESIGN FLOW HYDRAULIC ASSESSMENT 'NEW BEITH - MOUNTAIN RIDGE ROAD EXTENSION - EAST (EXCLUDING RAIL BRIDGE)'	

REVISION DETAILS				DRAWN	STATUS			CLIENT FRASERS PROPERTY AUSTRALIA	PROJECT NAME MOUNTAIN RIDGE ROAD UPGRADE, NEW BEITH - LOT 4	DRAWING TITLE		
REV	DATE	DESIGN	DRAWN	COVER PLAN								
A	12.09.24	BR	DH	ORIGINAL ISSUE								
B	30.05.25	BR	DH	REVISED ISSUE								
</												

GENERAL NOTES:

1.
- THE CONTRACTOR SHALL SUPPLY ALL LABOR, MATERIALS, PLANT AND EQUIPMENT TO CONSTRUCT THE WORKS AS DOCUMENTED AND STRICTLY IN ACCORDANCE WITH THE RELEVANT AUTHORITY STANDARDS, SPECIFICATIONS AND REQUIREMENTS.
2.
- THE EXISTING SERVICES THAT ARE SHOWN ON THE DRAWINGS ARE PROVIDED FOR INFORMATION PURPOSES ONLY. NO RESPONSIBILITY IS TAKEN BY THE SUPERINTENDENT OR THE PRINCIPAL FOR INFORMATION THAT HAS BEEN SUPPLIED BY OTHERS, OR ANY EXISTING SERVICES THAT MAY BE PRESENT NOT SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL VERIFY THE POSITION OF ANY UNDERGROUND SERVICES WITHIN THE AREAS OF WORKS AND SHALL BE RESPONSIBLE FOR MAKING GOOD ANY DAMAGE THERETO. ANY ALTERATION WORKS TO SERVICES WILL BE CARRIED OUT ONLY BY THE SERVICE OWNER AUTHORITY UNLESS APPROVED OTHERWISE.
3.
- ALL CONSTRUCTION ACTIVITIES UNDERTAKEN SHALL COMPLY WITH CURRENT WORKPLACE HEALTH AND SAFETY REQUIREMENTS AND LEGISLATION.
4.
- PRIOR TO COMMENCING WORK, THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL RELEVANT LOCAL AUTHORITY PERMITS.
5.
- THE CONTRACTOR SHALL NOT COMMENCE THE DEMOLITION OF ANY EXISTING BUILDINGS AND/OR STRUCTURES WITHOUT APPROVAL FROM THE SUPERINTENDENT.
6.
- THE CONTRACTOR SHALL APPLY INDUSTRY BEST PRACTICE SO WORKS SHALL NOT DISTURB OR AFFECT NEARBY RESIDENTS EITHER BY DUST, NOISE, FLOODING OR DISCONNECTION OF SERVICES. CONTRACTOR TO ENSURE THAT ACCESS AND SERVICES TO EXISTING PROPERTIES ARE AVAILABLE AT ALL TIMES.
7.
- THE CONTRACTOR SHALL VERIFY LEVELS OF EXISTING SERVICE CROSSINGS AND CONNECTION POINTS PRIOR TO COMMENCEMENT OF WORKS AND NOTIFY SUPERINTENDENT OF ANY DISCREPANCIES BETWEEN ACTUAL AND PROPOSED DESIGN LEVELS.
8.
- THESE ENGINEERING DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE APPROVED VEGETATION MANAGEMENT PLAN, WHERE APPLICABLE. WHEN IN DOUBT, ALL EXISTING TREES ARE TO REMAIN UNLESS DIRECTED OTHERWISE.
9.
- HOLD POINT: ONCE THE BASE OF MANHOLES, INSPECTION PITS, GULLIES AND FIELD INLETS FOR STORMWATER DRAINAGE AND SEWER RETICULATION HAVE BEEN POURED, CONSTRUCTION SHALL ONLY RE-COMMENCE ONCE THE SUPERINTENDENT AND/OR ENGINEER HAVE INSPECTED THE WORKS.
10.
- THE CONTRACTOR SHALL NOTE DURING THE COURSE OF THE WORKS WHEN JOINT INSPECTIONS WITH THE AUTHORITY AND THE SUPERINTENDENT ARE REQUIRED. THESE INCLUDE PRE-STARTS, SUBGRADES, PRE-SEALS, CLEARING, AND OTHER SUCH INSPECTIONS AS NOMINATED IN THE APPROVAL AND THE SPECIFICATIONS. THE CONTRACTOR SHALL ENSURE NO WORKS PROCEED PAST THE INSPECTION POINT UNTIL THE JOINT INSPECTION HAS BEEN SUCCESSFULLY COMPLETED.
11.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A SAFE MOVEMENT OF TRAFFIC AND THE PROTECTION OF PERSON AND PROPERTY THROUGH AND AROUND THE SITE. THE CONTRACTOR IS RESPONSIBLE FOR ALL TRAFFIC MANAGEMENT INCLUDING THE DESIGN, CONSTRUCTION, MAINTENANCE AND REMOVAL OF TEMPORARY ROADWAYS, DETOURS, SIGNS, LIGHTS AND BARRIER AS REQUIRED STRICTLY IN ACCORDANCE WITH THE RELEVANT AUTHORITY REQUIREMENTS.

BULK EARTHWORKS NOTES

1.
- NOTWITHSTANDING THE EXTENTS OF CUTTING AND FILLING SHOWN ON DRAWINGS, THE SUPERINTENDENT RESERVES THE RIGHT TO ADJUST THE FINISHED SURFACE LEVELS AND EARTHWORKS EXTENTS THROUGH WRITTEN DIRECTION.
2.
- THE CONTRACTOR SHALL UNDERTAKE ALL CLEARING USING INDUSTRY BEST PRACTICE INCLUDING CONSIDERATION OF FAUNA RELOCATION.
3.
- THE CONTRACTOR SHALL UNDERTAKE ALL EARTHWORKS IN ACCORDANCE WITH AS3798-2007 AND LOCAL AUTHORITY REQUIREMENTS. LEVEL 1 SUPERVISION IS REQUIRED.
4.
- THE CONTRACTOR SHALL CONSIDER LOADS GENERATED BY THE EARTHWORKS OPERATIONS SO AS TO AVOID DAMAGE TO ALL PIPES, SERVICES AND STRUCTURES.
5.
- THE EARTHWORKS DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE PROJECT'S SEDIMENT AND EROSION CONTROL PLAN, WHERE APPLICABLE.
6.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PLANNING, DESIGN, CERTIFICATION, IMPLEMENTATION AND MAINTENANCE OF AN EROSION AND SEDIMENT CONTROL PLAN THAT IS COMPLIANT WITH THE INTERNATIONAL EROSION CONTROL ASSOCIATION (IECA) GUIDELINE 'BEST PRACTICE EROSION AND SEDIMENT CONTROL' AND RELEVANT COUNCIL POLICIES.
7.
- ALLOTMENT FINISHED SURFACE LEVELS, SHOWN ON THE LAYOUT PLAN, INDICATE THE FINISHED SURFACE LEVEL AFTER TOPSOIL PLACEMENT.

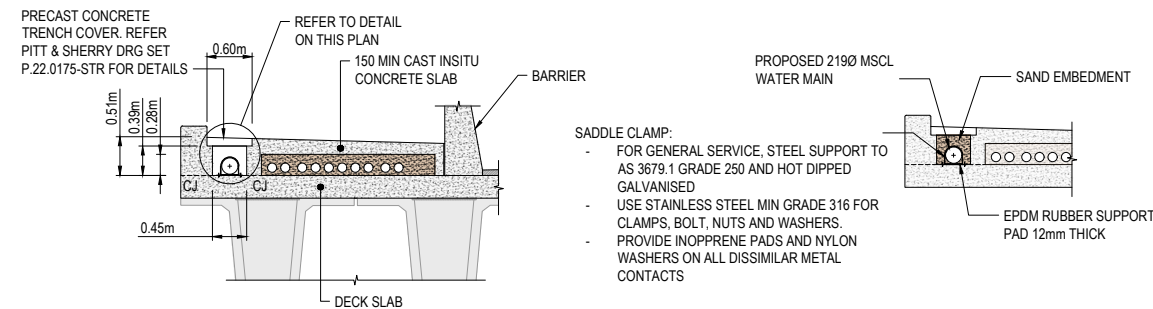
ROADWORKS AND DRAINAGE NOTES

1.
- ALL WORKS SHALL BE IN ACCORDANCE WITH THE RELEVANT AUTHORITY'S STANDARD DRAWINGS, METHODS AND SPECIFICATIONS.
2.
- NOTWITHSTANDING THE EXTENTS OF CUTTING AND FILLING SHOWN ON DRAWINGS, THE SUPERINTENDENT RESERVES THE RIGHT TO ADJUST THE FINISHED SURFACE LEVELS AND EARTHWORKS EXTENTS THROUGH WRITTEN DIRECTION.
3.
- NEW CONSTRUCTION SHALL BE NEATLY JOINED TO EXISTING FORMATION. WHERE REQUIRED, THE EXISTING FORMATION SHALL BE SAW CUT IN ACCORDANCE WITH IPWEAQ STD DRG RS-170. LEVELS AND GRADIENTS AT CONNECTIONS WITH EXISTING WORKS MAY BE VARIED AS REQUIRED TO ACHIEVE A SMOOTH CONNECTION.
4.
- THE CONTRACTOR SHALL UNDERTAKE ALL EARTHWORKS IN ACCORDANCE WITH AS3798-2007 AND LOCAL AUTHORITY REQUIREMENTS. LEVEL 1 SUPERVISION IS REQUIRED.
5.
- THE CONTRACTOR SHALL SUPPLY THE SUPERINTENDENT WITH THE SUBGRADE TEST RESULTS NECESSARY FOR ALL PAVEMENT DESIGN.
6.
- THE CONTRACTOR SHALL ENSURE A MINIMUM OF 75mm TOPSOIL TO ALL VERGE AND BATTER AREAS (AND STABILISATION AS ORDERED)
7.
- THE CONTRACTOR SHALL INSTALL ALL FOOTPATH AND PRAM RAMPS IN COMPLIANCE WITH THE AUTHORITY'S STANDARD DRAWINGS. PRAM RAMPS ARE TO BE LOCATED CLEAR OF DRAINAGE GULLY PITS AND FUTURE DRIVEWAY POSITIONS INDICATED ON THE LAYOUT PLANS.
8.
- THE CONTRACTOR SHALL INSTALL SUBSOIL DRAINS UNDER ALL KERBS AS REQUIRED BY THE LOCAL AUTHORITY'S STANDARDS.
9.
- THE CONTRACTOR SHALL ENSURE THAT ALL RETAINING WALL SUBSOIL DRAINS ARE TO CONNECT TO EITHER KERB ADAPTORS, KERB SUBSOIL DRAINS OR STORMWATER DRAINAGE STRUCTURES. CONTRACTOR TO DEMONSTRATE TO SUPERINTENDENT THAT SUITABLE CONNECTIONS HAVE BEEN PROVIDED FOR ALL WALLS.
10.
- ALL STORMWATER DRAINAGE MATERIALS, BEDDING, JOINTING AND STEP IRON REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE RELEVANT AUTHORITIES STANDARD DRAWINGS, METHODS AND SPECIFICATIONS.
11.
- THE STORMWATER PIPE CLASSES HAVE BEEN DESIGNED FOR SERVICE LOADS ONLY. THE CONTRACTOR SHALL ASSESS THE SUITABILITY OF MACHINERY USED ON SITE AND THE ANTICIPATED CONSTRUCTION LOADS, AND UPGRADE THE PIPE CLASSES IF NECESSARY IN ACCORDANCE WITH AS3725-2007.
12.
- THE TERM D₅₀ DOCUMENTED ON THE DRAWINGS, IN RELATION TO ROCK ARMORING, CORRESPONDS TO THE REQUIRED MEDIAN DIAMETER OF THE PLACED ROCKS. THE ROCKS USED SHALL NOT VARY IN SIZE BY +/- 30% OF THE PROPOSED D₅₀ SIZE.

REV	DATE	DESIGN	DRAWN	REVISION DETAILS			DRAWN	STATUS			SCALE	CLIENT	PROJECT NAME	DRAWING TITLE				
A	12.09.24	BR	DH	ORIGINAL ISSUE			DH	NOT FOR CONSTRUCTION						GENERAL NOTES				
B	30.05.25	BR	DH	REVISED ISSUE														
							BR	APPROVED DANIEL COLLINS  RPEQ 18631 DATE 30.05.25				ASSOCIATED CONSULTANT		MOUNTAIN RIDGE ROAD UPGRADE, NEW BEITH - LOT 4	PROJECT No.	DRAWING No.	REVISION	
												RPS GROUP (07) 3539 9500			20-0181	501	B	
												FOR AND ON BEHALF OF COLLIER'S INTERNATIONAL ENGINEERING & DESIGN PTY LTD						

NOTE:

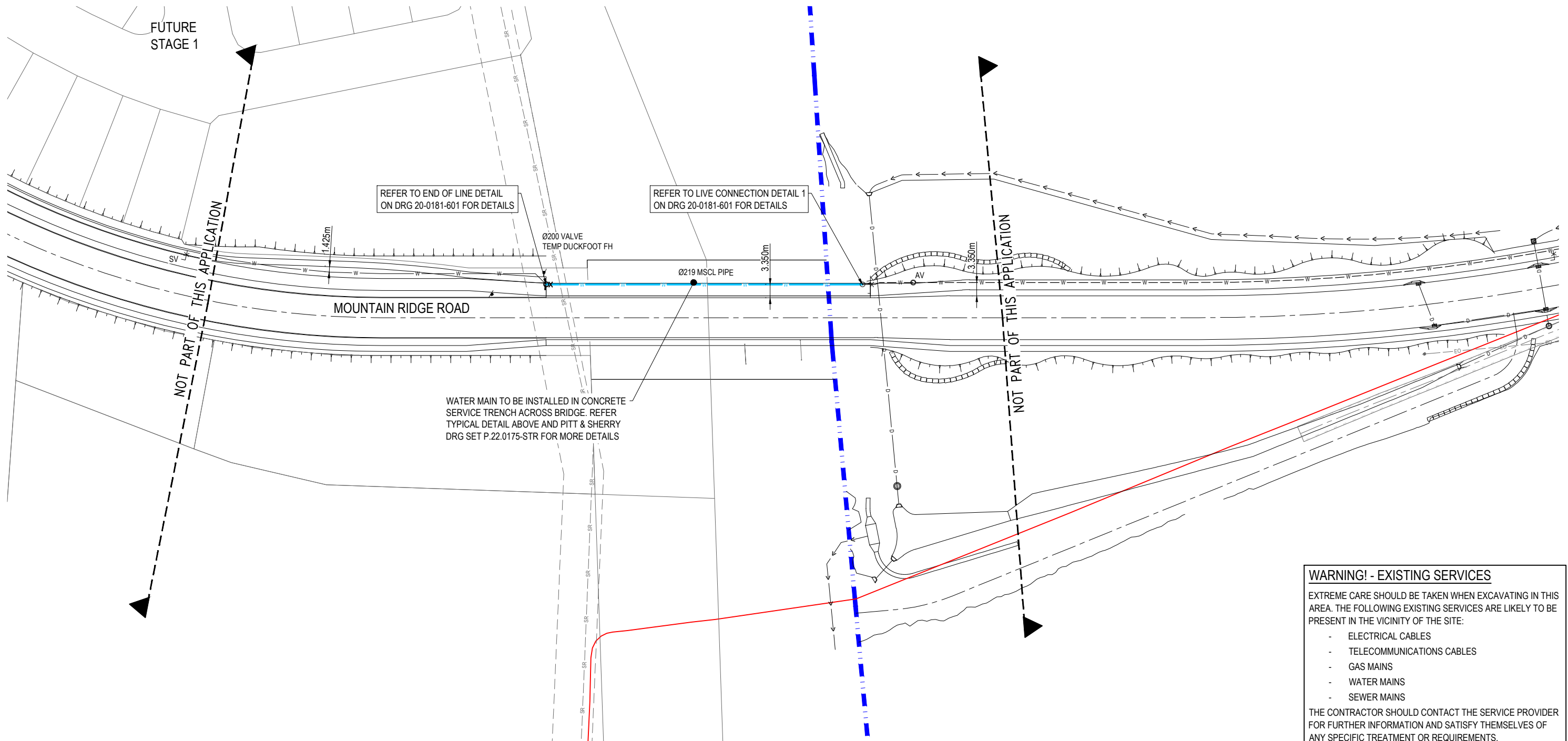
- WATER MAINS MUST CROSS OVER SERVICES WITH MINIMUM COVER PER SEQ CI. 7.4.2. AND CLEARANCES PER SEQ CODE TABLE 5.5.
- ALL VALVES TO BE FULLY RESTRAINED IN ACCORDANCE WITH THE SEQ CODE.
- MARKERS FOR PROPERTY SERVICES SHALL BE IN ACCORDANCE WITH SEQ-WAT-1106-1108. MARKERS FOR WATER MAIN CROSSINGS, HYDRANTS AND VALVES SHALL BE IN ACCORDANCE WITH SEQ-WAT-1300-1.
- ALL FITTINGS (HYDRANTS, VALVES, WATER SERVICE CONNECTIONS ETC) MUST BE INSTALLED ON STRAIGHT SECTIONS OF WATER MAIN.



TYPICAL BRIDGE WATER MAIN CROSSING DETAIL

SCALE 1:50

NOTE: REFER TO SEQ-WAT-1312-1 FOR MORE DETAILS AND SPECIFICATIONS



LEGEND

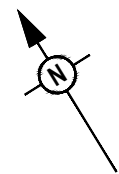
- | | | |
|---|---|--------------------------------------|
|  |  | PROPOSED AREA OF WORKS |
|  | | PROPOSED WATER MAIN 219Ø MSCL |
|  | | EXISTING WATER MAIN |
|  | | EXISTING STORMWATER DRAINAGE PIPE |
|  | | EXISTING SEWERAGE RISING MAIN |
|  | | EXISTING SEWERAGE RISING MAIN |
|  | | EXISTING TELECOMMUNICATION CABLE U/G |

WATER FITTINGS LEGEND

PROPOSED:

- | | |
|---|---------------------------------|
|  | TEMPORARY DUCKFOOT FIRE HYDRANT |
|  | ISOLATION VALVE |
|  | SCOUR VALVE |
|  | AIR VALVE |

REV	DATE	DESIGN	DRAWN	REVISION DETAILS		DRAWN	STATUS		SCALE	CLIENT	PROJECT NAME	DRAWING TITLE				
A	12.09.24	BR	DH	ORIGINAL ISSUE		DH	NOT FOR CONSTRUCTION		1:500	FRASERS PROPERTY AUSTRALIA	MOUNTAIN RIDGE ROAD UPGRADE, NEW BEITH - LOT 4	MOUNTAIN RIDGE ROAD UPGRADE, NEW BEITH	PROJECT No. 20-0181	DRAWING No. 602	REVISION No. B	
B	29.05.25	BR	DH	REVISED ISSUE					1:1000							10 5 0 10 20 A1
									1:500							1 0.5 0 1 2 A1
									1:100							1 0.5 0 1 2 A3
						BR	APPROVED DANIEL COLLINS  RPEQ 18631 DATE 29.05.25 FOR AND ON BEHALF OF COLLIERS INTERNATIONAL ENGINEERING & DESIGN PTY LTD		ASSOCIATED CONSULTANT RPS GROUP (07) 3539 9500							



-
- NOT PART OF THIS APPLICATION
- REFER TYPICAL BRIDGING DETAIL FOR WORKS ABOVE EXISTING RISING SEWER MAIN
- MOUNTAIN RIDGE ROAD
- FUTURE RAILWAY CORRIDOR
- EXISTING RAILWAY CORRIDOR
- TEMPORARY 1 IN 4 BATTER
- TEMPORARY TOE OF BATTER
- EXISTING GAS RELEASE VALVE
- EXISTING GAS RELEASE VALVE
- NOT PART OF THIS APPLICATION
- LEGEND:
- EXISTING WATER PIPE
 - ABUTMENT WALL (BY OTHERS)
 - BOULDER RETAINING WALL
- WARNING! - EXISTING SERVICES**
- EXTREME CARE SHOULD BE TAKEN WHEN EXCAVATING IN THIS AREA. THE FOLLOWING EXISTING SERVICES ARE LIKELY TO BE PRESENT IN THE VICINITY OF THE SITE:
- ELECTRICAL CABLES
 - TELECOMMUNICATIONS CABLES
 - GAS MAINS
 - WATER MAINS
 - SEWER MAINS
- THE CONTRACTOR SHOULD CONTACT THE SERVICE PROVIDER FOR FURTHER INFORMATION AND SATISFY THEMSELVES OF ANY SPECIFIC TREATMENT OR REQUIREMENTS.

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FOR FURTHER INFORMATION AND SATISFY THEMSELVES OF
ANY SPECIFIC TREATMENT OR REQUIREMENTS.

REV	DATE	DESIGN	DRAWN	REVISION DETAILS		DRAWN	STATUS		SCALE	CLIENT	PROJECT NAME	DRAWING TITLE		
A	12.08.24	BR	DH	ORIGINAL ISSUE		TG	NOT FOR CONSTRUCTION		1:500 10 5 0 10 20 A1	FRASERS PROPERTY AUSTRALIA	MOUNTAIN RIDGE ROAD UPGRADE, NEW BEITH - LOT 4	BULK EARTHWORKS LAYOUT PLAN		
B	30.05.25	BR	DH	REVISED ISSUE					1:1000  A3					
C	21.08.25	BR	TG	RFI RESPONSE										
						DESIGN	APPROVED DANIEL COLLINS  RPEQ 18631 DATE 21.08.25		ASSOCIATED CONSULTANT RPS GROUP (07) 3539 9500	MOUNTAIN RIDGE ROAD NEW BEITH	PROJECT No. 20-0181	DRAWING No. 502	REVISION C	
						BR	FOR AND ON BEHALF OF COLLIERS INTERNATIONAL ENGINEERING & DESIGN PTY LTD							

NOTE:

HORIZONTAL AND VERTICAL DESIGN HAS BEEN BASED ON A POSTED SPEED OF 60km/h AND DESIGN SPEED OF 70km/h.

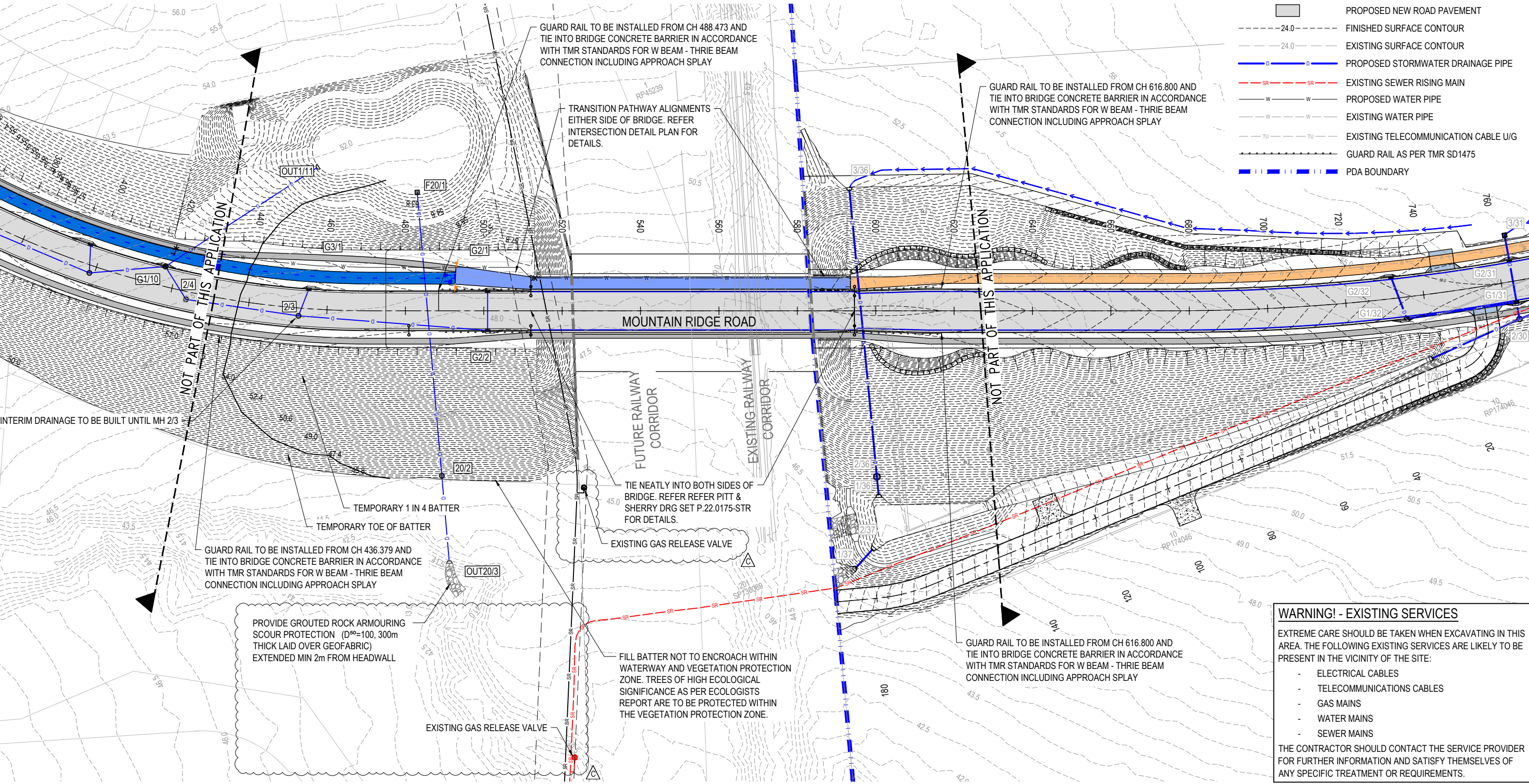
SUPERELEVATION WILL BE PROVIDED FOR HORIZONTAL CURVES WITH A RADIUS OF LESS THAN R400 IN ACCORDANCE WITH TABLE 7.6 OF AUSTRROADS GUIDE TO ROAD DESIGN PART 3 - GEOMETRIC DESIGN.

KERB TYPES NOTE:

REFER TO THE SURVEY SETOUT ENGINEERING DRAWING FOR KERB TYPES AND TRANSITION LOCATIONS

LEGEND

- PROPOSED AREA OF WORKS
PROPOSED ROAD RESERVE BOUNDARY
EXISTING LOT BOUNDARY
PROPOSED ROAD CONTROL LINE
PROPOSED KERB INVERT LINE
PROPOSED KERB TRANSITION LOCATION
PROPOSED CYCLE PATH
PROPOSED CONCRETE SHARED PATH
PROPOSED 2.5m SHARED PATH
PROPOSED CONCRETE PATH AND PRAM RAMP
PROPOSED NEW ROAD PAVEMENT
FINISHED SURFACE CONTOUR
EXISTING SURFACE CONTOUR
PROPOSED STORMWATER DRAINAGE PIPE
EXISTING SEWER RISING MAIN
PROPOSED WATER PIPE
EXISTING WATER PIPE
EXISTING TELECOMMUNICATION CABLE U/G
GUARD RAIL AS PER TMR SD1475
PDA BOUNDARY



WARNING! - EXISTING SERVICES

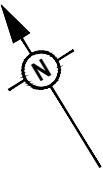
EXTREME CARE SHOULD BE TAKEN WHEN EXCAVATING IN THIS AREA. THE FOLLOWING EXISTING SERVICES ARE LIKELY TO BE PRESENT IN THE VICINITY OF THE SITE:

- ELECTRICAL CABLES
- TELECOMMUNICATIONS CABLES
- GAS MAINS
- WATER MAINS
- SEWER MAINS

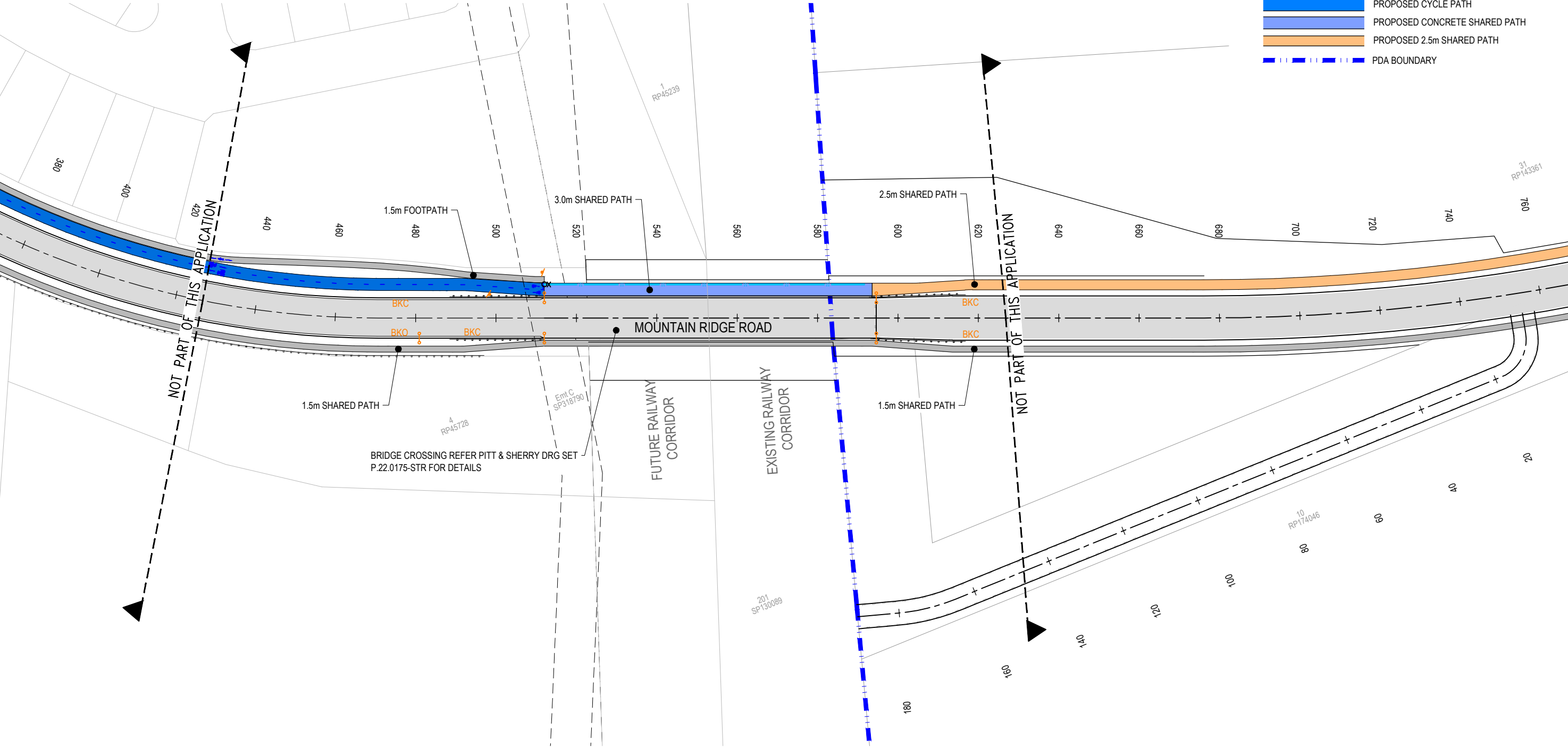
THE CONTRACTOR SHOULD CONTACT THE SERVICE PROVIDER FOR FURTHER INFORMATION AND SATISFY THEMSELVES OF ANY SPECIFIC TREATMENT OR REQUIREMENTS.

REV	DATE	DESIGN	DRAWN	REVISION DETAILS	DRAWN	STATUS	CLIENT	PROJECT NAME	DRAWING TITLE
A	12.09.24	BR	DH	ORIGINAL ISSUE	TG	NOT FOR CONSTRUCTION	FRASERS PROPERTY AUSTRALIA	MOUNTAIN RIDGE ROAD UPGRADE, NEW BEITH - LOT 4	ROADWORKS AND DRAINAGE LAYOUT PLAN
B	30.05.25	BR	DH	REVISED ISSUE	DESIGN	APPROVED	ASSOCIATED CONSULTANT	MOUNTAIN RIDGE ROAD NEW BEITH	PROJECT No. 20-0181
C	21.08.25	BR	TG	RFI RESPONSE	BR	DANIEL COLLINS RPEQ 18631 21.08.25	RPS GROUP (07) 3539 9500		DRAWING No. 503
						FOR AND ON BEHALF OF COLLIER'S INTERNATIONAL ENGINEERING & DESIGN PTY LTD			REVISION C

MOUNTAIN RIDGE ROAD SETOUT								
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	3591.441	7911.878	74.110	120°40'00.00"			
TC	223.168	3783.399	7798.053	64.677	120°40'00.00"			
IP 2	269.608	3824.584	7773.631	62.066		R = 155.000	92.881	34°20'00.00"
CT	316.048	3844.820	7730.236	59.598	155°00'00.00"			
TC	340.606	3855.198	7707.979	58.666	155°00'00.00"			
IP 3	405.596	3883.481	7647.328	57.444		R = -221.500	129.980	33°37'19.65"
CT	470.586	3940.615	7612.483	57.891	121°22'40.35"			
TC	676.163	4116.127	7505.443	57.850	121°22'40.35"			
IP 4	772.722	4199.605	7454.532	56.026		R = -500.000	193.119	22°07'47.34"
CT	869.282	4296.112	7438.818	58.053	99°14'53.01"			
IP 5	1702.462	5118.463	7304.918	50.729				
IP 6	1707.138	5123.078	7304.167	50.750		R = 400.000	9.352	1°20'22.33"
CT	1711.814	5127.674	7303.308	50.763	100°35'17.61"			
TC	1743.675	5158.993	7297.453	50.629	100°35'17.61"			
IP 7	1748.074	5163.317	7296.645	50.591		R = -400.000	8.797	1°15'36.32"
CT	1752.472	5167.658	7295.932	50.554	99°19'41.29"			
IP 8	1771.137	5186.076	7292.907	50.416	99°19'41.29"			



LEGEND	
	PROPOSED AREA OF WORKS
	PROPOSED ROAD RESERVE BOUNDARY
	EXISTING LOT BOUNDARY
	PROPOSED NEW ROAD PAVEMENT
	PROPOSED ROAD CONTROL LINE
	PROPOSED BARRIER KERB AND CHANNEL 'TYPE B1'
	PROPOSED BARRIER KERB ONLY 'TYPE B2'
	PROPOSED SEMI-MOUNTABLE KERB ONLY MODIFIED 'TYPE SM2' (REFER DETAIL)
	PROPOSED EDGE RESTRAINT 'TYPE ER1'
	PROPOSED KERB TRANSITION LOCATION
	PROPOSED CONCRETE PATH AND PRAM RAMP
	PROPOSED CYCLE PATH
	PROPOSED CONCRETE SHARED PATH
	PROPOSED 2.5m SHARED PATH
	PDA BOUNDARY

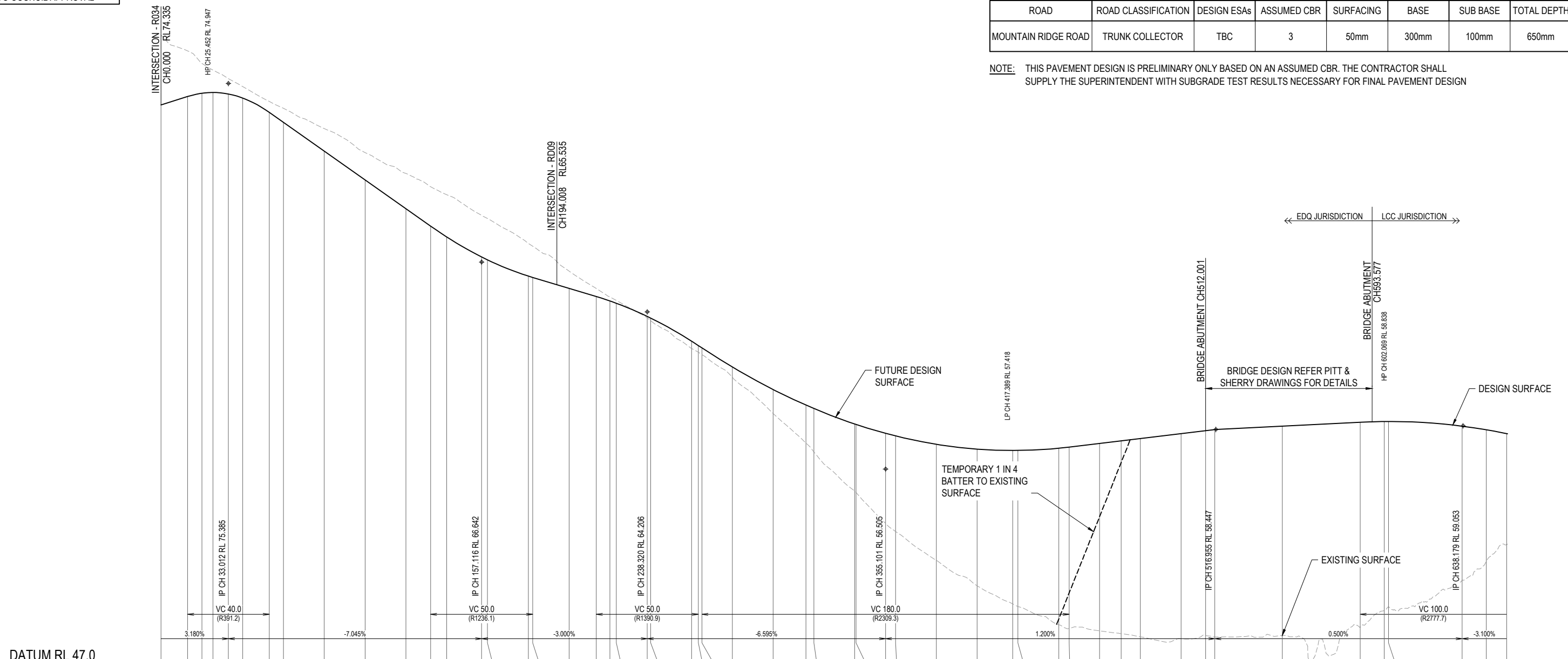


REV	DATE	DESIGN	DRAWN	REVISION DETAILS			DRAWN	STATUS				SCALE 1:500 10 5 0 10 20 1:1000 A1 A3	CLIENT	FRASERS PROPERTY AUSTRALIA	PROJECT NAME	MOUNTAIN RIDGE ROAD UPGRADE, NEW BEITH - LOT 4	DRAWING TITLE		
A	12.09.24	BR	DH	ORIGINAL ISSUE			DH	NOT FOR CONSTRUCTION									SURVEY SETOUT AND KERB TYPES LAYOUT PLAN		
B	29.05.25	BR	DH	REVISED ISSUE															
							DESIGN	APPROVED DANIEL COLLINS  RPEQ 18631 DATE 29.05.25			BR		ASSOCIATED CONSULTANT	RPS GROUP (07) 3539 9500	MOUNTAIN RIDGE ROAD NEW BEITH	PROJECT No.	DRAWING No.	REVISION	
							FOR AND ON BEHALF OF COLLIER'S INTERNATIONAL ENGINEERING & DESIGN PTY LTD			20-0181						504	B		

PAVEMENT DESIGN SUBJECT TO COUNCIL APPROVAL

ASSUMED PAVEMENT DETAILS (SUBJECT TO CBR TESTING)							
ROAD	ROAD CLASSIFICATION	DESIGN ESAs	ASSUMED CBR	SURFACING	BASE	SUB BASE	TOTAL DEPTH
MOUNTAIN RIDGE ROAD	TRUNK COLLECTOR	TBC	3	50mm	300mm	100mm	650mm

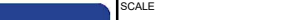
NOTE: THIS PAVEMENT DESIGN IS PRELIMINARY ONLY BASED ON AN ASSUMED CBR. THE CONTRACTOR SHALL SUPPLY THE SUPERINTENDENT WITH SUBGRADE TEST RESULTS NECESSARY FOR FINAL PAVEMENT DESIGN

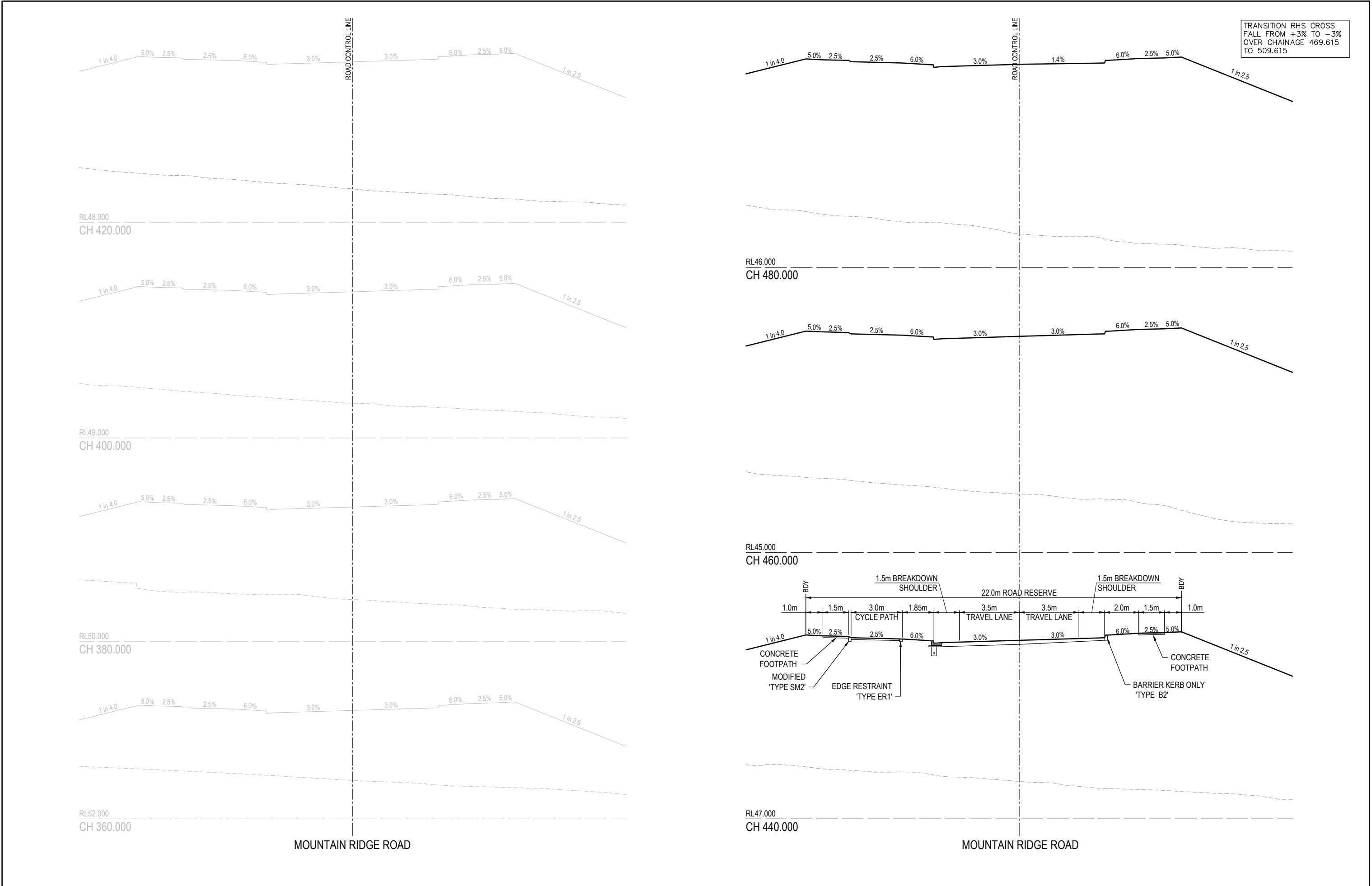


HORIZONTAL CURVES	CHAINAGES	EXISTING SURFACE	DESIGN SURFACE	RHS LIP LEVEL	LHS LIP LEVEL	CUT (-) / FILL
	0.000	71.756	74.335			-3.421
	13.012	76.983	74.749			-2.233
	20.000	76.374	74.909		74.824	-1.465
	25.452	76.043	74.947		74.570	-1.096
	33.012	75.628	74.874		74.497	-0.754
	40.000	75.237	74.676		74.300	-0.561
	53.012	74.509	73.976		73.600	-0.533
	60.000	74.176	73.484		73.107	-0.693
	80.000	73.180	72.075		71.698	-1.105
	100.000	72.004	70.666		70.290	-1.339
	120.000	70.983	69.257		68.950	-1.726
	132.116	70.333	68.403		68.027	-1.930
	140.000	69.944	67.873		67.497	-2.071
	157.116	68.929	66.895		66.518	-2.034
	160.000	68.776	66.753		66.482	-2.023
	180.000	67.559	65.957			-1.602
	182.116	67.418	65.892			-1.526
	200.000	66.202	65.356			-0.846
	213.320	65.349	64.956			-0.393
	220.000	64.933	64.740			-0.193
	223.168	64.767	64.626			-0.141
	238.320	63.918	63.981		63.728	0.064
	240.000	63.775	63.900		63.649	0.124
	260.000	62.419	62.772		62.550	0.353
	263.320	62.239	62.557		62.340	0.318
	265.101	62.121	62.440		62.225	0.319
	280.000	61.003	61.505		61.312	0.502
	300.000	59.231	60.402		60.266	1.172
	316.048	57.790	59.642		59.639	1.852
	320.000	57.345	59.472		59.496	2.127
	340.000	55.434	58.715		58.852	3.282
	340.606	55.364	58.695		58.831	3.331
	355.101	53.845	58.259		58.395	4.414
	360.000	53.454	58.132		58.268	4.678
	380.000	52.042	57.721		57.858	5.679
	400.000	50.794	57.484		57.620	6.690
	417.389	48.905	57.418		57.555	7.513
	420.000	48.780	57.420		57.556	7.640
	440.000	48.882	57.529		57.666	8.647
	445.101	48.699	57.585		57.721	8.886
	460.000	48.584	57.764		57.900	9.180
	470.586	48.448	57.891		58.021	9.442
	480.000	48.294	58.004		58.073	9.709
	500.000	48.203	58.244		58.184	10.040
	512.001	48.359	58.388			10.029
	516.955	47.853	58.447			10.394
	550.000	47.751	58.612			10.861
	588.179	48.832	58.803			9.971
	600.000	49.632	58.837			9.205
	602.069	49.730	58.838		58.696	9.108
	638.179	51.068	58.603		58.451	7.535
	650.000	52.068	58.424		58.273	6.356
	660.000	52.833	58.234		58.082	5.400

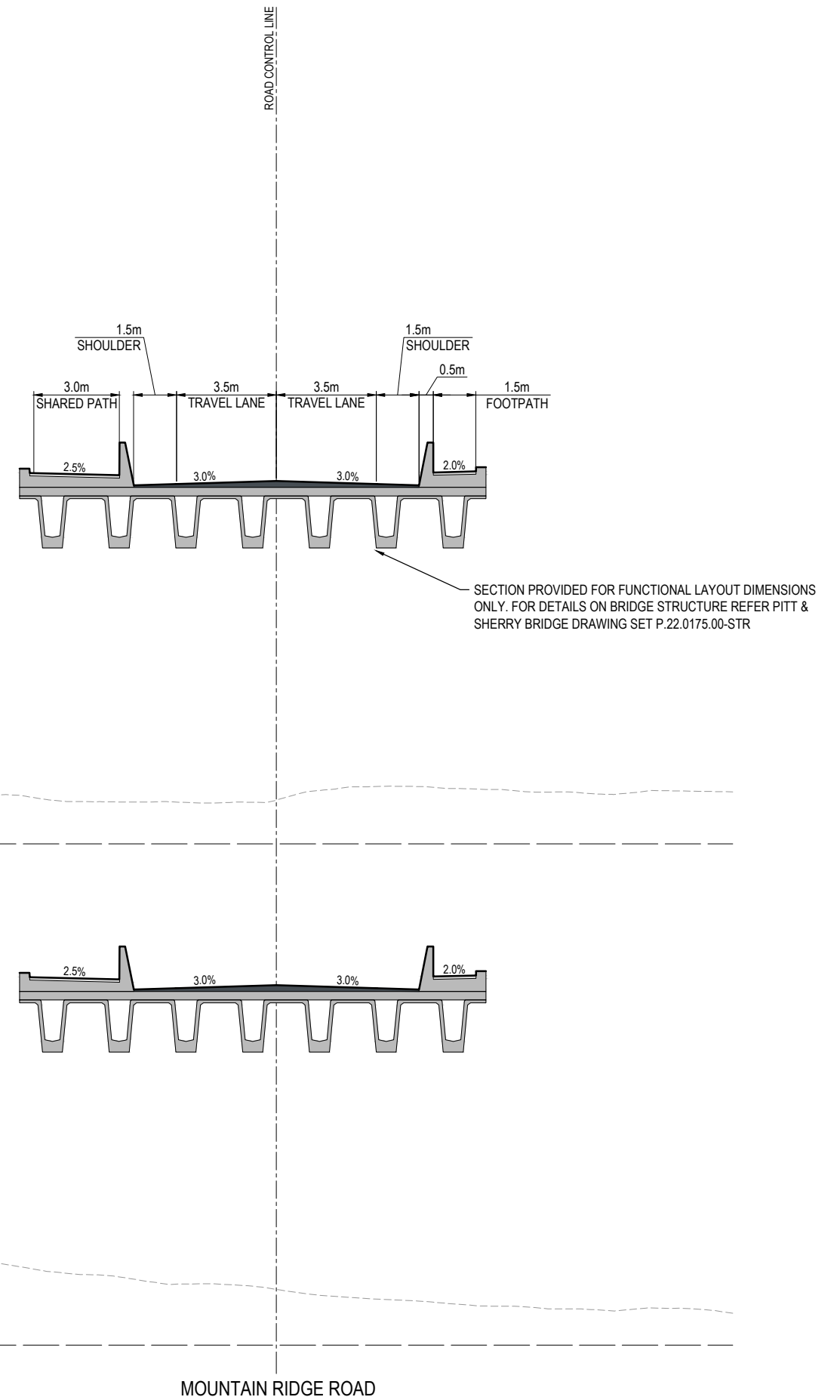
#: REFER INTERSECTION DETAILS PLAN FOR KERB RETURN LONGITUDINAL SECTIONS

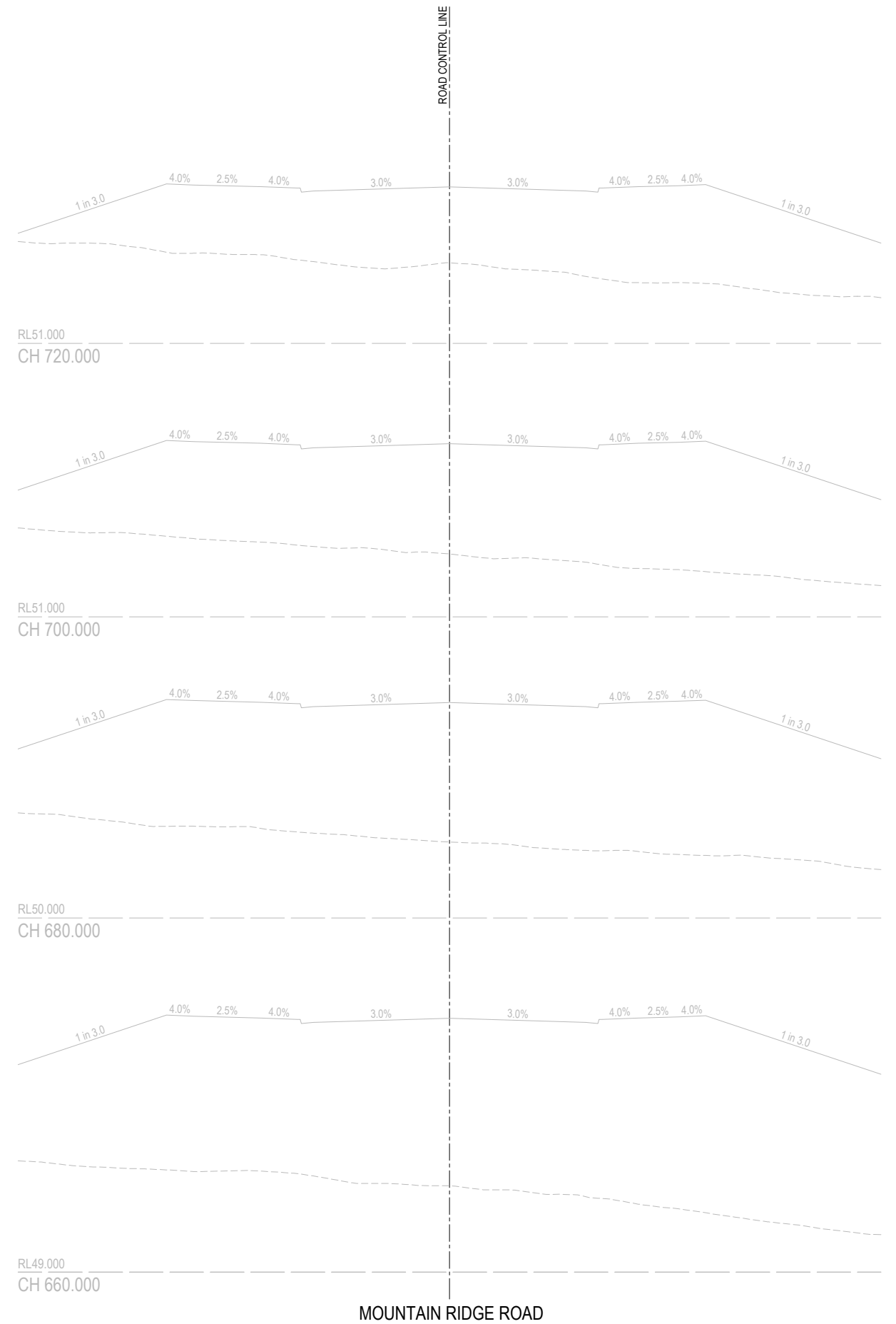
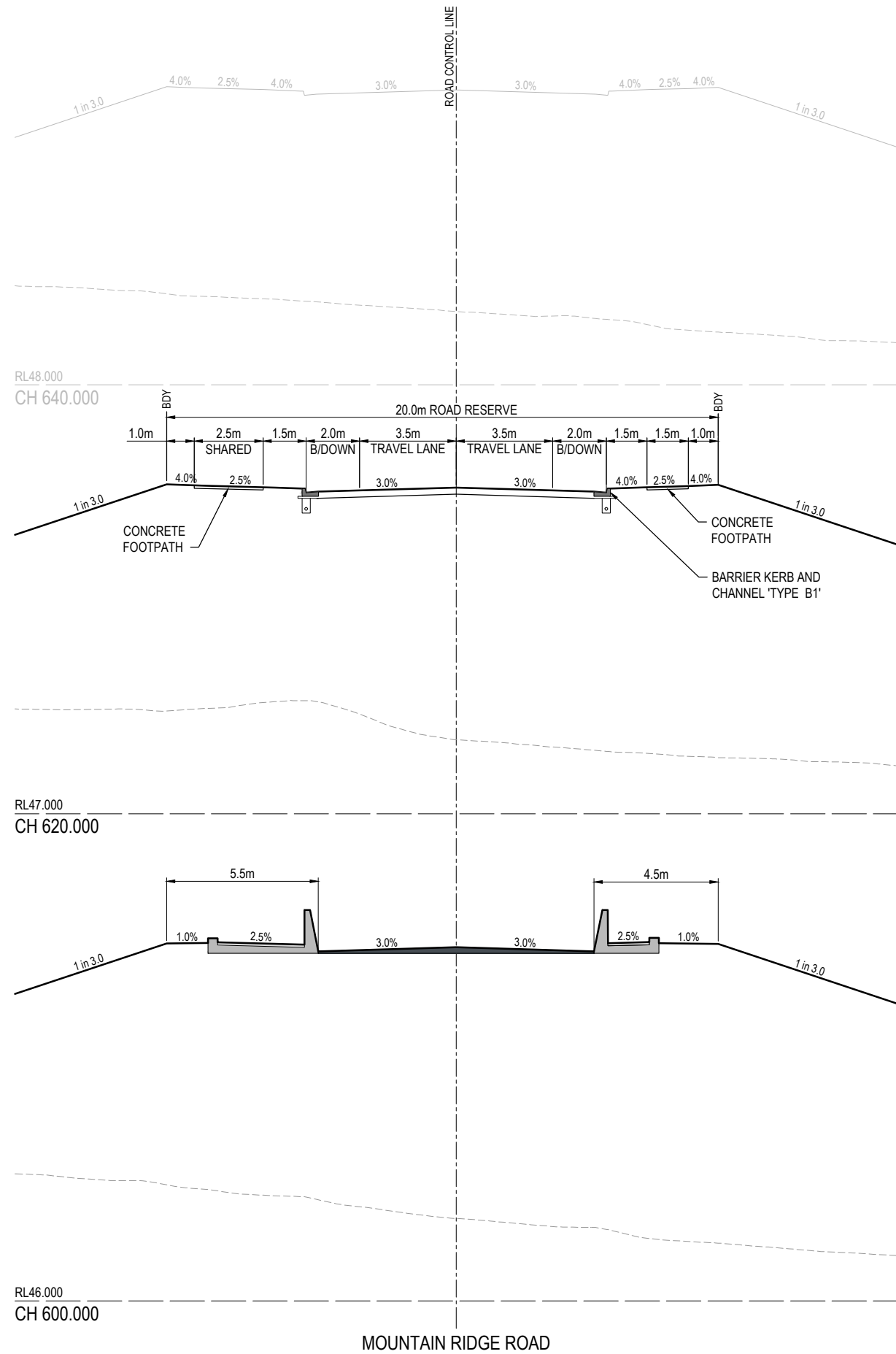
MOUNTAIN RIDGE ROAD

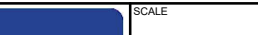
REV	DATE	DESIGN	DRAWN	REVISION DETAILS		DRAWN	STATUS		SCALE	CLIENT	PROJECT NAME	DRAWING TITLE			
A	12.09.24	BR	DH	ORIGINAL ISSUE		DH	NOT FOR CONSTRUCTION		1:1000 1:2000	FRASERS PROPERTY AUSTRALIA	MOUNTAIN RIDGE ROAD UPGRADE, NEW BEITH - LOT 4	MOUNTAIN RIDGE ROAD LONGITUDINAL SECTION			
B	29.05.25	BR	DH	REVISED ISSUE					DESIGN						1:100 1:200
									BR						

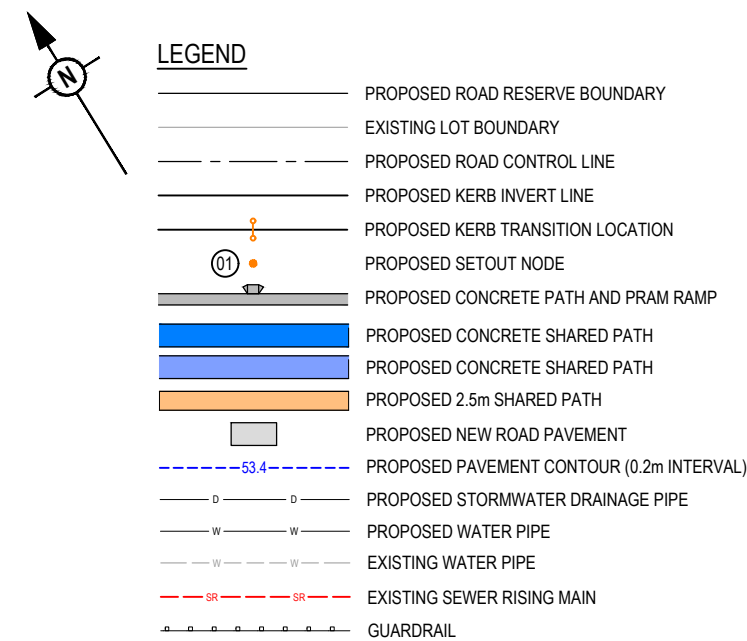


REV	DATE	DESIGN	DRAWN	REVISION DETAILS			DRAWN	STATUS				SCALE 1:100 1:200 1 0 1 2 3 4 5 A1 A3	CLIENT	PROJECT NAME	DRAWING TITLE				
A	12.09.24	BR	DH	ORIGINAL ISSUE			DH	NOT FOR CONSTRUCTION							FRASERS PROPERTY AUSTRALIA ASSOCIATED CONSULTANT RPS GROUP (07) 3539 9500	MOUNTAIN RIDGE ROAD UPGRADE, NEW BEITH - LOT 4	MOUNTAIN RIDGE ROAD CROSS SECTIONS SHEET 1 OF 3		
B	29.05.25	BR	DH	REVISED ISSUE															
							DESIGN	APPROVED	DATE										
							BR	DANIEL COLLINS  RPEQ 18631 29.05.25											
FOR AND ON BEHALF OF COLLIER'S INTERNATIONAL ENGINEERING & DESIGN PTY LTD																			

[illegible]



REV	DATE	DESIGN	DRAWN	REVISION DETAILS		DRAWN	STATUS			SCALE 1:100 1:200 	CLIENT FRASERS PROPERTY AUSTRALIA ASSOCIATED CONSULTANT RPS GROUP (07) 3539 9500	PROJECT NAME MOUNTAIN RIDGE ROAD UPGRADE, NEW BEITH - LOT 4 MOUNTAIN RIDGE ROAD NEW BEITH	DRAWING TITLE MOUNTAIN RIDGE ROAD CROSS SECTIONS SHEET 3 OF 3						
A	12.09.24	BR	DH	ORIGINAL ISSUE		DH	NOT FOR CONSTRUCTION						PROJECT No. 20-0181 DRAWING No. 508 REVISION B						
B	29.05.25	BR	DH	REVISED ISSUE															
						DESIGN	APPROVED DANIEL COLLINS  RPEQ 18631 DATE 29.05.25 FOR AND ON BEHALF OF COLLIER'S INTERNATIONAL ENGINEERING & DESIGN PTY LTD												



NUMBER	EASTING	NORTHING
1	3961.568	7607.728
2	3963.263	7606.609
3	3955.206	7595.385
4	3954.472	7594.076
5	3976.988	7600.516
6	3978.683	7599.398
7	3976.964	7596.851
8	3978.837	7595.614
9	3973.110	7586.223
10	3972.329	7584.943
11	4041.974	7542.468
12	4042.803	7543.719
13	4043.869	7543.654
14	4044.568	7543.215
15	4049.076	7552.192
16	4049.786	7551.772
17	4048.483	7553.140
18	4050.250	7552.139
19	4058.647	7550.630
20	4060.273	7549.709
21	4064.847	7543.146
22	4065.558	7542.726
23	4068.975	7542.328
24	4070.601	7541.407
25	4059.097	7532.025
26	4058.268	7530.773

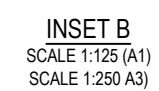
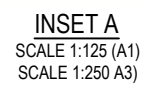
KERB TYPES NOTE:
REFER TO THE SURVEY SETOUT ENGINEERING DRAWING
FOR KERB TYPES AND TRANSITION LOCATIONS

WARNING! - EXISTING SERVICES

EXTREME CARE SHOULD BE TAKEN WHEN EXCAVATING IN THIS AREA. THE FOLLOWING EXISTING SERVICES ARE LIKELY TO BE PRESENT IN THE VICINITY OF THE SITE:

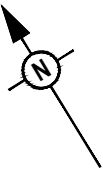
- ELECTRICAL CABLES
- TELECOMMUNICATIONS CABLES
- GAS MAINS
- WATER MAINS
- SEWER MAINS

THE CONTRACTOR SHOULD CONTACT THE SERVICE PROVIDER FOR FURTHER INFORMATION AND SATISFY THEMSELVES OF ANY SPECIFIC TREATMENT OR REQUIREMENTS.

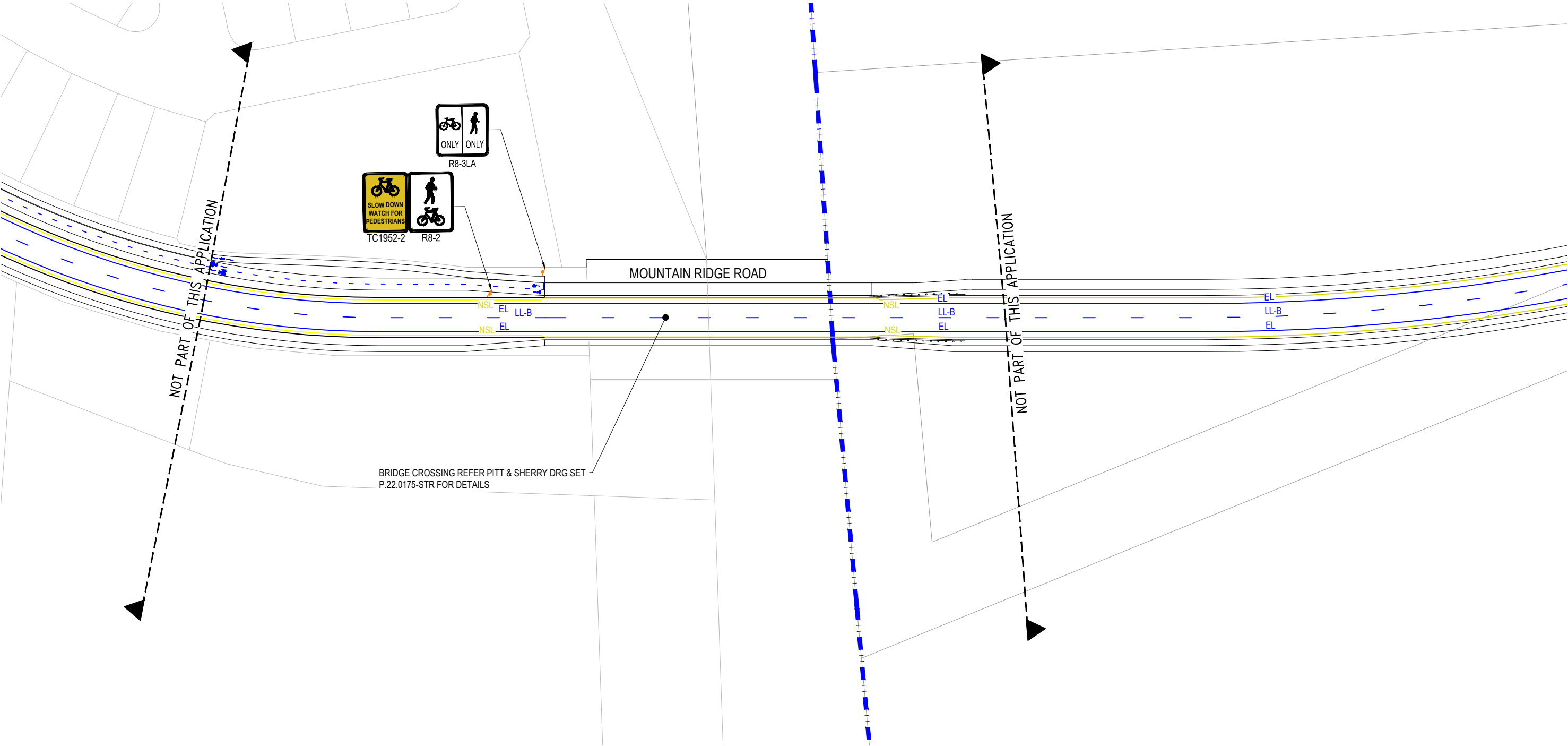


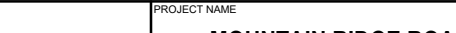
REV	DATE	DESIGN	DRAWN	REVISION DETAILS		DRAWN	STATUS			SCALE		CLIENT	PROJECT NAME	DRAWING TITLE		
A	12.09.24	BR	DH	ORIGINAL ISSUE		DH	NOT FOR CONSTRUCTION			1:200		A1	FRASERS PROPERTY AUSTRALIA	MOUNTAIN RIDGE ROAD UPGRADE, NEW BEITH - LOT 4	INTERSECTION DETAILS LAYOUT PLAN	
B	29.05.25	BR	DH	REVISED ISSUE					1:400		A3					
						DESIGN	APPROVED	DATE	1:100		A1	ASSOCIATED CONSULTANT RPS GROUP (07) 3539 9500	MOUNTAIN RIDGE ROAD NEW BEITH	PROJECT No.	DRAWING No.	REVISION
						BR	 DANIEL COLLINS RPEQ 18631 29.05.25 FOR AND ON BEHALF OF COLLIER'S INTERNATIONAL ENGINEERING & DESIGN PTY LTD		1:200		A3			20-0181	509	B

- NOTES:
1. ALL SIGNS AND LINEMARKING SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND LCC STANDARDS.
 2. TRAFFIC SIGN POSTS SHALL BE IN ACCORDANCE WITH LCC STANDARD DRAWINGS.
 3. STREET NAME SIGN SHALL BE IN ACCORDANCE WITH LCC STANDARD DRAWINGS.
 4. CONTRACTOR TO ENSURE SIGN LOCATIONS ARE LL-BEAR OF FUTURE DRIVEWAY LOCATIONS - LOCATE ON PB OR MID BLOCK.

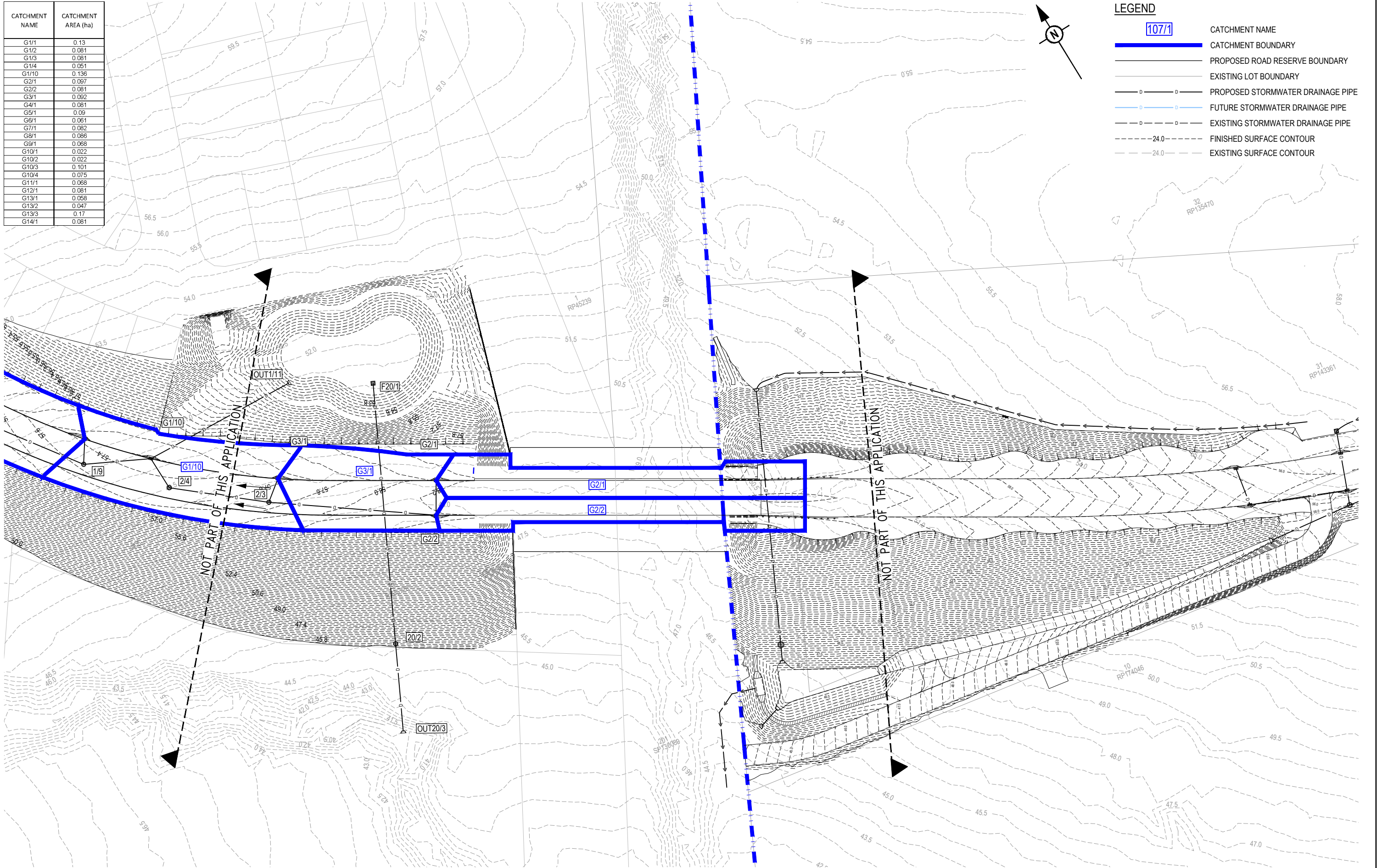


LEGEND	
	PROPOSED AREA OF WORKS
	PROPOSED ROAD RESERVE BOUNDARY
	EXISTING LOT BOUNDARY
	PROPOSED LANE LINE - BROKEN
	PROPOSED LANE LINE - CONTINUOUS
	PROPOSED EDGE LINE
	PROPOSED CONTINUITY LINE
	PROPOSED GIVE WAY LINE
	PROPOSED NO STOPPING LINE



REV	DATE	DESIGN	DRAWN	REVISION DETAILS		DRAWN	STATUS			SCALE 1:500 10 5 0 10 20 1:1000 A1 A3	CLIENT	PROJECT NAME	DRAWING TITLE		
A	12.09.24	BR	DH	ORIGINAL ISSUE		DH	NOT FOR CONSTRUCTION						SIGNS AND LINEMARKING LAYOUT PLAN		
B	29.05.25	BR	DH	REVISED ISSUE							FRASERS PROPERTY AUSTRALIA	MOUNTAIN RIDGE ROAD UPGRADE, NEW BEITH - LOT 4			
											ASSOCIATED CONSULTANT	MOUNTAIN RIDGE ROAD NEW BEITH			
											RPS GROUP (07) 3539 9500				

CATCHMENT NAME	CATCHMENT AREA (ha)
G1/1	0.13
G1/2	0.081
G1/3	0.081
G1/4	0.051
G1/10	0.136
G2/1	0.097
G2/2	0.081
G3/1	0.092
G4/1	0.081
G5/1	0.09
G6/1	0.061
G7/1	0.082
G8/1	0.086
G9/1	0.068
G10/1	0.022
G10/2	0.022
G10/3	0.101
G10/4	0.075
G11/1	0.068
G12/1	0.081
G13/1	0.058
G13/2	0.047
G13/3	0.17
G14/1	0.081



LEGEND

- 107/1** CATCHMENT NAME
- 107/1** CATCHMENT BOUNDARY
- PROPOSED ROAD RESERVE BOUNDARY
- EXISTING LOT BOUNDARY
- PROPOSED STORMWATER DRAINAGE PIPE
- FUTURE STORMWATER DRAINAGE PIPE
- EXISTING STORMWATER DRAINAGE PIPE
- FINISHED SURFACE CONTOUR
- EXISTING SURFACE CONTOUR

REV	DATE	DESIGN	DRAWN	REVISION DETAILS	DRAWN	STATUS	SCALE	CLIENT	PROJECT NAME	DRAWING TITLE
A	12.09.24	BR	DH	ORIGINAL ISSUE	DH	NOT FOR CONSTRUCTION	1:500 10 5 0 10 20 A1	FRASERS PROPERTY AUSTRALIA	MOUNTAIN RIDGE ROAD UPGRADE, NEW BEITH - LOT 4	STORMWATER CATCHMENT LAYOUT PLAN
B	29.05.25	BR	DH	REVISED ISSUE	BR	APPROVED DANIEL COLLINS RPEQ 18631 DATE 29.05.25	1:1000	ASSOCIATED CONSULTANT RPS GROUP (07) 3539 9500	MOUNTAIN RIDGE ROAD NEW BEITH	PROJECT No. 20-0181 DRAWING No. 511 REVISION B

STRUCTURE NAME	1/6		1/7		1/8		1/9	G1/10	HEADWALL OUT 1/11	
STRUCTURE DESCRIPTION	STD MANHOLE 1050mm DIA		STD MANHOLE 1050mm DIA		STD MANHOLE 1050mm DIA		STD MANHOLE 1050mm DIA	STD TYPE A GULLY (SAG) L.I.L.: 3.6m Linel: TYPE B & C ON 12000 MH		
Diagram illustrating the profile view of the sewerage system, showing the relationship between the structure, pipe, and ground surface. The diagram includes a cross-section of the pipe and its connection to the structure. The profile shows the ground surface, the pipe invert, and the pipe itself. The diagram also indicates the location of the structures and the headwall.										
PIPE SIZE (mm)	← 375 3 →		← 450 3 →		← 525 3 →		← 600 3 →		← 750 3 →	
PIPE CLASS										
PIPE GRADE (%)	← 4.95% 20.20 →		← 3.11% 32.14 →		← 1.47% 68.18 →		← 1.46% 68.50 →		← 1.00% 100.00 →	
PIPE SLOPE (1 in X)										
FULL PIPE VELOCITY (m/s)	← 3.48 4.03 →		← 2.80 3.57 →		← 2.22 2.73 →		← 1.81 2.83 →		← 1.56 2.65 →	
PART FULL VELOCITY (m/s)										
DATUM RL	43.0									
H.G.L IN PIPE & W.S.E IN STRUCTURE	62.405 61.224		58.623 58.623	58.521	57.021 57.021	56.960	56.529 56.529	56.449	56.062 54.495	53.626 53.626
PIPE FLOW (Cumecs)	0.384		0.445		0.480		0.512		0.688	
PIPE CAPACITY AT GRADE (Cumecs)	0.390		0.503		0.521		0.742		1.114	
DEPTH TO INVERT	61.340 1.279	60.854 1.765	58.179 1.451	58.092 1.537	56.556 1.504	56.500 1.561	56.009 1.545	55.980 1.574	55.696 1.546	53.200 1.300
INVERT LEVEL OF DRAIN										
DESIGN SURFACE LEVEL	62.619		59.629		58.061		57.554		57.242	54.500
SETOUT COORDINATES	E 3811.727 N 7773.087		E 3843.142 N 7729.102		E 3865.280 N 7684.974		E 3884.830 N 7657.812		E 3902.253 N 7649.107	E 3947.363 N 7647.025
RUNNING CHAINAGE	202.061	54.052	256.113	49.370	305.482	33.466	338.949	19.476	358.425	403.583

LINE	1
------	---

E 3969.162		57.092		NOT PART OF THIS APPLICATION		G2/1	
0.000	N 7600.929	56.806	1.273	0.045	0.124	57.012	STD TYPE A GULLY L.I.L.: 2.4m Linel; TYPE B K&C
10.000	E 3983.955	56.756	1.394			57.008	
10.000	N 7592.392	56.736	1.414	0.081	0.138	56.945	STD TYPE A GULLY L.I.L.: 2.4m Linel; TYPE B K&C
48.391							
58.391	E 3924.697	56.434	1.304			56.641	
29.008	N 7620.685	56.196	1.542	0.121	0.124	56.521	2/3 STD MANHOLE 1050mm DIA
						56.496	
87.399	E 3902.373	56.051	1.437			56.351	
9.900	N 7639.208	56.031	1.457	0.119	0.141	56.352	2/4 STD MANHOLE 1050mm DIA
						56.296	
97.299	E 3902.253	55.967	1.275			56.222	
	N 7649.107	53.652	3.590			54.495	G1/10 STD TYPE A GULLY (SAG) L.I.L.: 3.6m Linel; TYPE B K&C ON 12002 MH

2

E 3930-502		56.597		G3/1		STD TYPE A GULLY	
0.000	N 7625.134	57.527	56.253	1.274		L.I.L.: 2.4m Linel: TYPE B K&C	
7.314							
	E 3924.697		56.216	1.522		STD MANHOLE	
7.314	N 7620.685	57.738	56.196	1.542		1050mm DIA	

3

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20

REV	DATE	DESIGN	DRAWN	REVISION DETAILS		DRAWN	STATUS
A	12.08.24	BR	DH	ORIGINAL ISSUE		DH	NOT FOR CONSTRUCTION
B	29.05.25	BR	DH	REVISED ISSUE			



SCALE

1:1000 10 0 10 20 30 40 50 A1
1:2000 HORIZONTAL A3

1:100 2 1 0 2 4 A1
1:200 VERTICAL A3

CLIENT	FRASERS PROPERTY AUSTRALIA
ASSOCIATED CONSULTANT	RPS GROUP (07) 3539 9500

PROJECT NAME

**MOUNTAIN RIDGE ROAD
UPGRADE, NEW BEITH - LOT 4**

MOUNTAIN RIDGE ROAD
NEW BEITH

DRAWING TITLE		
STORMWATER DRAINAGE LONGITUDINAL SECTION		
PROJECT No.	DRAWING No.	REVISION
20-0181	512	B

REV	DATE	DESIGN	DRAWN	REVISION DETAILS			DRAWN	STATUS		SCALE	CLIENT FRASERS PROPERTY AUSTRALIA	PROJECT NAME MOUNTAIN RIDGE ROAD UPGRADE, NEW BEITH - LOT 4	DRAWING TITLE		
A	12.09.24	BR	DH	ORIGINAL ISSUE			DH	NOT FOR CONSTRUCTION					PROJECT No. 20-0181	DRAWING No. 513	REVISION B
B	29.05.25	BR	DH	REVISED ISSUE											

STAGE 1 - PROPOSED ROAD UPGRADE

MOUNTAIN RIDGE ROAD, NEW BEITH

FOR 'FRASERS PROPERTY AUSTRALIA'

DRAWING LIST

SEWERAGE AND WATER RETICULATION		
20-0181-600	WATER RETICULATION COVER PLAN	
20-0181-601	WATER RETICULATION GENERAL NOTES AND LIVE WORKS DETAILS	
20-0181-602	WATER RETICULATION LAYOUT PLAN	

ESTATE/STAGE	MOUNTAIN RIDGE ROAD UPGRADE
CLIENT	FRASERS PROPERTY AUSTRALIA
SP APPLICATION No.	#
SP APPROVAL DATE	
No. OF ALLOTMENTS	N/A



LOCALITY PLAN
SCALE 1:5,000 (A1)
SCALE 1:10,000 (A3)

REV	DATE	DESIGN	DRAWN	REVISION DETAILS		DRAWN	STATUS			SCALE 1:2000 1:4000 	CLIENT FRASERS PROPERTY AUSTRALIA ASSOCIATED CONSULTANT RPS GROUP (07) 3539 9500	PROJECT NAME MOUNTAIN RIDGE ROAD UPGRADE, NEW BEITH - LOT 4 MOUNTAIN RIDGE ROAD NEW BEITH	DRAWING TITLE WATER RETICULATION COVER PLAN									
A	12.09.24	BR	DH	ORIGINAL ISSUE		DH	NOT FOR CONSTRUCTION						PROJECT No.									
B	29.05.25	BR	DH	REVISED ISSUE									PROJECT No.									
						BR	APPROVED DANIEL COLLINS  RPEQ 18631 DATE 29.05.25						DRAWING No.			REVISION						
						FOR AND ON BEHALF OF COLLIERS INTERNATIONAL ENGINEERING & DESIGN PTY LTD								20-0181			600			B		

GENERAL NOTES:

1. THE CONTRACTOR SHALL SUPPLY ALL LABOR, MATERIALS, PLANT AND EQUIPMENT TO CONSTRUCT THE WORKS AS DOCUMENTED AND STRICTLY IN ACCORDANCE WITH THE RELEVANT AUTHORITY STANDARDS, SPECIFICATIONS AND REQUIREMENTS.
2. EXISTING SERVICES RELEVANT TO THE PROJECT HAVE BEEN CONSIDERED THROUGHOUT DESIGN AND IS BASED ON SURVEY INFORMATION PROVIDED BY THE SURVEYOR AND THE CONTRACTOR. THE RPEQ WHO CERTIFIED THE DESIGN OR THE PRINCIPAL'S CONSTRUCTION RPEQ HAVE RELIED UPON THIS INFORMATION TO INFORM THE DESIGN. THE CONTRACTOR SHALL VERIFY THE POSITION OF ANY UNDERGROUND SERVICES WITHIN THE AREAS OF WORKS AND SHALL BE RESPONSIBLE FOR MAKING GOOD ANY DAMAGE THERETO. ANY ALTERATION WORKS TO SERVICES WILL BE CARRIED OUT ONLY BY THE SERVICE OWNER AUTHORITY UNLESS APPROVED OTHERWISE.
3. ALL DESIGN AND CONSTRUCTION ACTIVITIES UNDERTAKEN SHALL COMPLY WITH CURRENT WORKPLACE HEALTH AND SAFETY REQUIREMENTS AND LEGISLATION.
4. PRIOR TO COMMENCING WORK, THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL RELEVANT LOCAL AUTHORITY PERMITS.
5. THE CONTRACTOR SHALL NOT COMMENCE THE DEMOLITION OF ANY EXISTING BUILDINGS AND/OR STRUCTURES WITHOUT APPROVAL FROM THE SUPERINTENDENT.
6. THE CONTRACTOR SHALL APPLY INDUSTRY BEST PRACTICE SO WORKS SHALL NOT DISTURB OR AFFECT NEARBY RESIDENTS EITHER BY DUST, NOISE, FLOODING OR DISCONNECTION OF SERVICES. CONTRACTOR TO ENSURE THAT ACCESS AND SERVICES TO EXISTING PROPERTIES ARE AVAILABLE AT ALL TIMES.
7. THE CERTIFICATION OF THIS DESIGN IS BASED ON SURVEY AND POTHOLE INFORMATION PROVIDED BY THE SURVEYOR AND/OR CONTRACTOR AT THE TIME OF DESIGN. PRIOR TO COMMENCEMENT OF WORKS, THE CONTRACTOR SHALL VERIFY LEVELS OF EXISTING SERVICE CROSSINGS AND CONNECTION POINTS AND NOTIFY THE RPEQ WHO CERTIFIED THE DESIGN OR THE PRINCIPAL'S CONSTRUCTION RPEQ OF ANY DISCREPANCIES BETWEEN ACTUAL AND PROPOSED DESIGN LEVELS. THE CERTIFICATION OF THIS DESIGN IS BASED ON SURVEY AND POTHOLE INFORMATION PROVIDED BY THE SURVEYOR AND CONTRACTOR AT THE TIME OF DESIGN.
8. HOLD POINT: ONCE THE BASE OF MANHOLES HAVE BEEN POURED, CONSTRUCTION SHALL ONLY RE-COMMENCE ONCE THE SUPERINTENDENT AND/OR ENGINEER HAVE INSPECTED THE WORKS.
9. THE CONTRACTOR SHALL NOTE DURING THE COURSE OF THE WORKS WHEN JOINT INSPECTIONS WITH THE AUTHORITY AND THE SUPERINTENDENT ARE REQUIRED. THESE INCLUDE PRE-STARTS, SUBGRADES, PRE-SEALS, CLEARING, AND OTHER SUCH INSPECTIONS AS NOMINATED DURING THE PRE-START, IN THE APPROVAL AND THE SPECIFICATIONS. THE CONTRACTOR SHALL ENSURE NO WORKS PROCEED PAST THE INSPECTION POINT UNTIL THE JOINT INSPECTION HAS BEEN SUCCESSFULLY COMPLETED.
10. THE CONTRACTOR SHALL VERIFY LEVELS OF EXISTING SERVICE CROSSINGS AND CONNECTION POINTS PRIOR TO COMMENCEMENT OF WORKS AND NOTIFY THE RPEQ WHO CERTIFIED THE DESIGN OR THE PRINCIPAL'S CONSTRUCTION RPEQ OF ANY DISCREPANCIES BETWEEN ACTUAL AND PROPOSED DESIGN LEVELS. THE CERTIFICATION OF THIS DESIGN IS BASED ON SURVEY AND POTHOLE INFORMATION PROVIDED BY THE SURVEYOR AND CONTRACTOR AT THE TIME OF DESIGN.
11. THESE ENGINEERING DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE APPROVED VEGETATION MANAGEMENT PLAN, WHERE APPLICABLE. WHEN IN DOUBT, ALL EXISTING TREES ARE TO REMAIN UNLESS DIRECTED OTHERWISE.

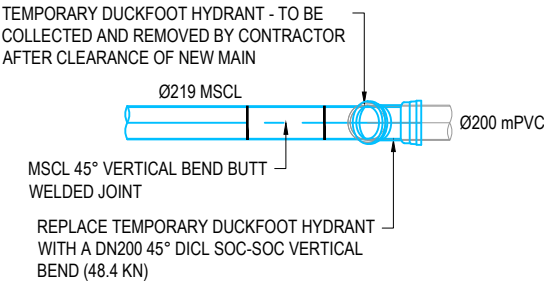
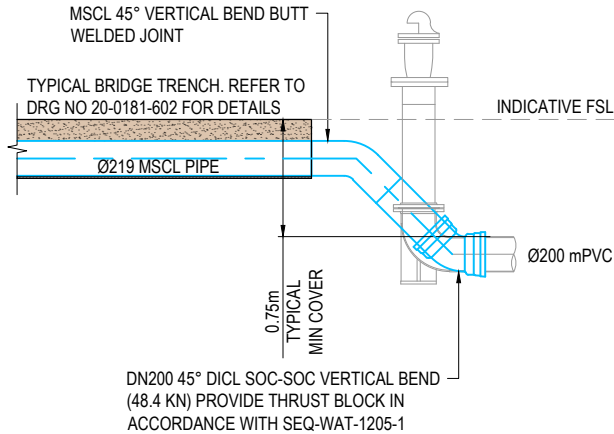
ENVIRONMENTAL CONDITIONS

VEGETATION PROTECTION

- A. TREES LOCATED ALONG THE FOOTPATH SHALL BE, TRANSPLANTED PRIOR TO CONSTRUCTION, OR REPLACED IF DESTROYED.
- B. WHEN WORKING WITHIN 4m OF TREES, RUBBER OR HARDWOOD GIRDLES SHALL BE CONSTRUCTED WITH 1.8m BATTENS CLOSELY SPACED AND ARRANGED VERTICALLY FROM GROUND LEVEL. GIRDLES SHALL BE STRAPPED TO TREES PRIOR TO CONSTRUCTION AND REMAIN UNTIL COMPLETION.
- C. TREE ROOTS SHALL BE TUNNELED UNDER, RATHER THAN SEVERED. IF ROOTS ARE SEVERED THE DAMAGED AREA SHALL BE TREATED WITH A SUITABLE FUNGICIDE. CONTACT RELEVANT COUNCIL ARBORIST FOR FURTHER ADVICE.
- D. ANY TREE LOPPING REQUIRED SHOULD BE UNDERTAKEN BY AN APPROVED ARBORIST.

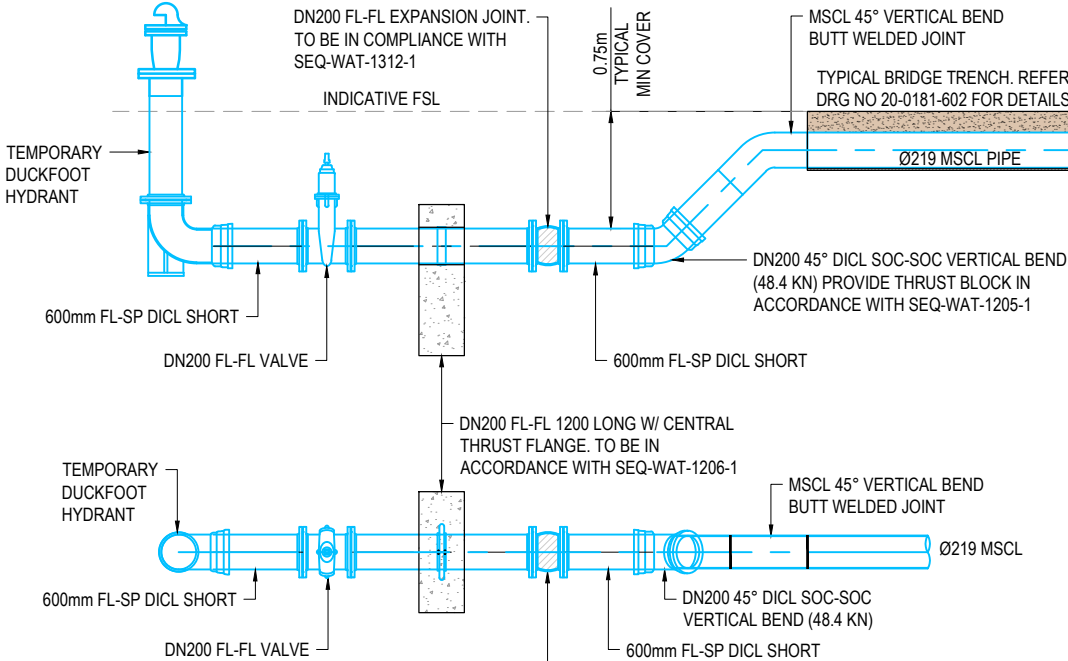
WATER RETICULATION NOTES

1. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT WSAA WATER SUPPLY CODE OF AUSTRALIA SPECIFICATIONS AND STANDARD - SOUTH EAST QUEENSLAND SERVICE PROVIDERS EDITION.
2. UNLESS SPECIFIED OTHERWISE ALL MATERIALS AND WORK SHALL COMPLY WITH THE RELEVANT AUSTRALIAN STANDARDS.
3. THE DESIGN HAS BEEN UNDERTAKEN TO COMPLY WITH CURRENT SOUTH EAST QUEENSLAND WATER CODE AND LOGAN WATER STANDARDS.
4. THE CONSTRUCTION OF THE WATER RETICULATION WORK SHOWN ON THIS DRAWING MUST BE SUPERVISED BY AN ENGINEER WHO HAS RPEQ REGISTRATION. WORKS NOT COMPLYING WITH THIS REQUIREMENT WILL NOT BE PERMITTED TO CONNECT TO THE RETICULATION SYSTEM.
5. ALL MATERIALS USED IN THE WORKS SHALL COMPLY WITH LOGAN WATER ACCEPTED PRODUCTS AND MATERIALS LIST OR BE APPROPRIATELY SHOWN, LISTED AND DEFINED IN THE ENGINEERING SUBMISSION SO THAT THE ALTERNATIVE PRODUCT OR MATERIAL CAN BE ASSESSED AND IF APPROPRIATE, APPROVED BY LOGAN WATER.
6. ADOPT LIP OF KERB OR SHOULDER OF ROAD AS PERMANENT LEVEL.
7. COVER ON MAINS FROM PERMANENT LEVEL TO BE AS SHOWN IN SEQ-WAT-1200-2.
8. CONSTRUCT EMBEDMENT AND TRENCH FILL TO SEQ-WAT-1200-1 TO 1204-1 AND COUNCIL STANDARDS FOR ROADWAY CROSSINGS. TYPE D MINIMUM UNESS GEOTECHNICAL INVESTIGATIONS INDICATE TYPE C IS ADEQUATE.
9. PROVIDE BULKHEADS / TRENCH STOPS IN ACCORDANCE WITH SEQ WATER SUPPLY CODE TABLE 7.5 AND SEQ-WAT-1209-1 AND 1210-1.
10. CONSTRUCT THRUST BLOCKS ON ALL UNRESTRAINED VALVES, BENDS, TEES, TAPERS, DEAD ENDS TO SEQ-WAT-1205-1, 1206-1 AND 1207-1 AND WHERE OTHER PIPES CONNECT TO PE PIPE.
11. INSTALL DETECTABLE MARKER TAPE ON ALL WATER MAINS AND PROPERTY SERVICES.
12. CONSTRUCT FIRE HYDRANTS AND STOP VALVES TO SEQ-WAT-1301-1, 1302-1, 1303-2, 1305-1, 1306-1 AND 1409-1.
13. CONSTRUCT SCOURS TO SEQ-WAT-1307-2 (ONLY MAINS DN315 AND LARGER). SCOURS MUST DISCHARGE INTO AN OPEN STORMWATER GULLY PIT. DISCHARGE TO THE FACE OF KERB AND CHANNEL IS NOT ACCEPTABLE TO LOGAN WATER.
14. INSTALL ROAD AND PAVEMENT MARKERS TO SEQ-WAT-1107-1, 1107-2, 1300-1 AND 1300-2.
15. CONSTRUCT HYDRANTS AT THE ENDS OF ALL NEW MAINS BEFORE THE SCOUR AND WHERE REQUIRED FOR COMMISSIONING PURPOSES. LOGAN WATER PREFERENCE IS TO AVOID TAPPING BANDS FOR TEST POINTS AND PROVIDE EITHER A TEMPORARY DUCKFOOT HYDRANT OR FLANGED SHORT PIPE WITH A TEMPORARY TAPPED BLANK FLANGE. TESTING AGAINST LIVE MAINS AND VALVES IS NOT PERMITTED.
16. TESTING LOCATIONS AND TEMPORARY FITTINGS ARE REQUIRED ON SERVICES OVER 10m LONG UNLESS APPROVED IN WRITING FOR WORKS TO BE UNDERTAKEN AS LIVE WORKS. TESTING AND AS -CONSTRUCTED REQUIREMENTS TO BE DOCUMENTED ON DRAWINGS.
17. 316SS BACKING RINGS SHALL BE USED WITH FULL-FACE PE FLANGES. PE STUB-FLANGES ARE NOT ACCEPTED. WHEN JOINING TO EXISTING UNRESTRAINED PIPELINES, PROVIDE A DICL SHORT PIPE WITH THRUST FLANGE AND THRUST BLOCK. BOLT ON UNI FLANGES SHALL NOT BE USED AS THRUST FLANGES. THRUST (PUDDLE) FLANGES SHALL BE AN APPROVED PREFABRICATED DICL/MSCL SHORT PIPE WITH PREFABRICATED THRUST FLANGE.
18. ALL DISUSED SERVICES SHALL BE SEALED AT THE MAIN AND FERRULE CLOSED OR TAPPING BAND REMOVED AND SECTION OF MAIN SUBSTITUTED AS LIVE WORKS. LARGE DIAMETER SERVICES SHALL BE DISUSED BY REMOVING ANY PROPERTY SERVICE PIPEWORK AT THE POINT OF CONNECTION TO THE MAIN, AND INSTALLING A BLANK FLANGE DIRECTLY ON THE TEE.
19. AC MAINS SHALL BE REPLACED COLLAR-COLLAR.
20. CONSTRUCT PROPERTY SERVICES TO SEQ-WAT-1107-1 AND 1107-3.
21. PROVIDE DN40 PE100 WATER SERVICES FOR ROAD CROSSINGS SERVICING TWO DWELLINGS. PROVIDE DN32 PE100 WATER SERVICES FOR ROAD CROSSINGS SERVICING A SINGLE DWELLING. IF THE LONG TERM STATIC HEAD OF THE PROPERTY SERVICE IS LESS THAN 350 kPa (35m) OR IF PRIVATE BOOSTER IS REQUIRED, THE MINIMUM SIZE OF PROPERTY SERVICE SHALL BE DN40 PE100.
22. WATER SERVICE UNDER ROADS AND DRIVEWAYS MUST BE PLACED WITHIN 100mm DIA. CONDUITS, REFER SEW-WAT-1107-1.
23. A WATER METER SUPPLIED AT THE DEVELOPER'S COST, IS TO BE INSTALLED AT THE SERVICE POINT OF EACH LOT IN ACCORDANCE WITH THE LOGAN WATER STANDARD DRAWING.
24. WATER METER AND FIRE HYDRANTS MUST BE LOCATED MINIMUM 1.1m CLEAR OF ENERGEX PILLARS.



WATER LIVE CONNECTION DETAIL 1

SCALE 1:25 (A1)
SCALE 1:50 (A3)



END OF LINE DETAIL

SCALE 1:25 (A1)
SCALE 1:50 (A3)

WATER RETICULATION
LIVE CONNECTIONS

CONNECTION 1			
STREET	MOUNTAIN RIDGE ROAD		
LOCATION	LOT 4 RP45728		
LENGTH	3.00m	TYPE OF MAIN	Ø200 PN16
DATE COMMENCED		DATE COMPLETED	
SIGNATURE			

LIVE WORKS NOTES:

1. ALL LIVE WORKS SHALL BE UNDERTAKEN BY THE CONTRACTOR IN ACCORDANCE WITH AN APPROVED NETWORKS ACCESS PERMIT, UNDER THE SUPERVISION OF LOGAN WATER, AT THE DEVELOPERS EXPENSE.
2. LIVE WORKS CANNOT COMMENCE UNTIL ALL RELEVANT TEST CERTIFICATES HAVE BEEN PROVIDED AND ACCEPTED BY LOGAN WATER.
3. PRE-CHLORINATED WATER FITTINGS SHALL BE USED FOR ALL DRINKING WATER LIVE WORKS CONNECTIONS.

ALL WATER CONSTRUCTION SHALL COMPLY WITH ALL QUEENSLAND LEGISLATION

ALL ENVIRONMENTAL PROTECTION MEASURES SHALL BE IMPLEMENTED PRIOR TO ANY CONSTRUCTION WORK COMMENCING, INCLUDING CLEARING

THIS DESIGN PACKAGE SHOWS CONNECTIONS TO INFRASTRUCTURE THAT HAS NOT BEEN ACCEPTED 'ON-MAINTENANCE' BY LOGAN WATER. LIVE WORKS CANNOT COMMENCE UNTIL THE PRECEDING WORKS HAVE BEEN ACCEPTED 'ON MAINTENANCE' BY LOGAN WATER.

DURING ANY CONSTRUCTION ACTIVITY AT LEAST ONE PERSON ON SITE MUST HAVE COMPLETED A PIPE LAYING TRAINING COURSE APPROVED BY THE PIPE SUPPLIER OR MANUFACTURER AND APPROPRIATE TO THE PIPELINE UNDER CONSTRUCTION. THE TRAINING COURSE MUST HAVE BEEN COMPLETED WITHIN THE LAST TEN YEARS.

ALL SITE AND FACTORY PE WELDING SHALL BE CARRIED OUT BY A PERSON WHO HAS COMPLETED RELEVANT NATIONALLY ACCREDITED COURSES FOR BUTT WELDING/ELECTROFUSION AND HOLD A VALID WELDING CERTIFICATE IN ACCORDANCE WITH AS/NZS 2033.

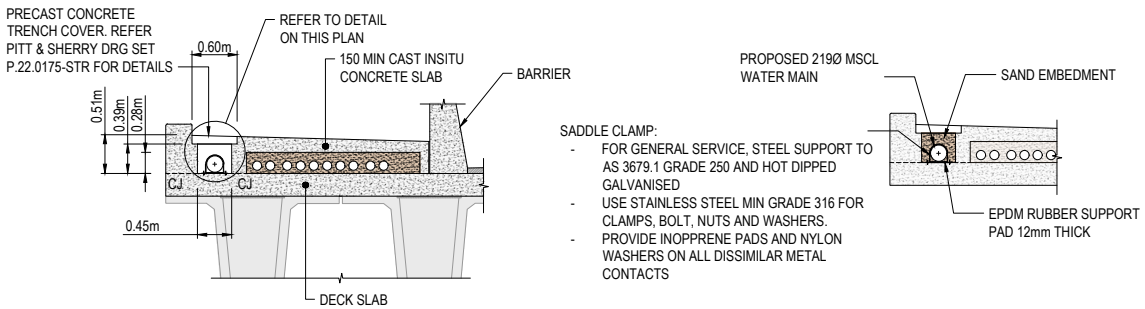
THE CONTRACTOR SHALL PROVIDE DOCUMENTED EVIDENCE OF ACCEPTABLE QUALIFICATIONS TO LOGAN WATER.

REV	DATE	DESIGN	DRAWN	REVISION DETAILS		DRAWN	STATUS	FOR AND ON BEHALF OF COLLIER'S INTERNATIONAL ENGINEERING & DESIGN PTY LTD	SCALE	CLIENT	PROJECT NAME	DRAWING TITLE		
A	12.09.24	BR	DH	ORIGINAL ISSUE		DH	NOT FOR CONSTRUCTION					WATER RETICULATION GENERAL NOTES AND LIVE WORKS DETAILS		
B	29.05.25	BR	DH	REVISED ISSUE								PROJECT No.	DRAWING No.	REVISION
						DESIGN	APPROVED					20-0181	601	B
						BR	DANIEL COLLINS	RPEQ 18631	DATE	FRASERS PROPERTY AUSTRALIA	MOUNTAIN RIDGE ROAD UPGRADE, NEW BEITH - LOT 4			
										ASSOCIATED CONSULTANT	MOUNTAIN RIDGE ROAD NEW BEITH			
										RPS GROUP (07) 3539 9500				

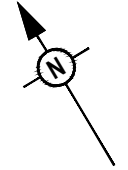
NOTE:
THIS DESIGN PACKAGE SHOWS CONNECTIONS TO INFRASTRUCTURE THAT HAS NOT BEEN ACCEPTED 'ON MAINTENANCE' BY LOGAN WATER. LIVE WORKS CANNOT COMMENCE UNTIL THE PRECEDING WORKS HAVE BEEN ACCEPTED 'ON MAINTENANCE'.

NOTE:

- WATER MAINS MUST CROSS OVER SERVICES WITH MINIMUM COVER PER SEQ CI. 7.4.2. AND CLEARANCES PER SEQ CODE TABLE 5.5.
- ALL VALVES TO BE FULLY RESTRAINED IN ACCORDANCE WITH THE SEQ CODE.
- MARKERS FOR PROPERTY SERVICES SHALL BE IN ACCORDANCE WITH SEQ-WAT-1106-1108. MARKERS FOR WATER MAIN CROSSINGS, HYDRANTS AND VALVES SHALL BE IN ACCORDANCE WITH SEQ-WAT-1300-1.
- ALL FITTINGS (HYDRANTS, VALVES, WATER SERVICE CONNECTIONS ETC) MUST BE INSTALLED ON STRAIGHT SECTIONS OF WATER MAIN.

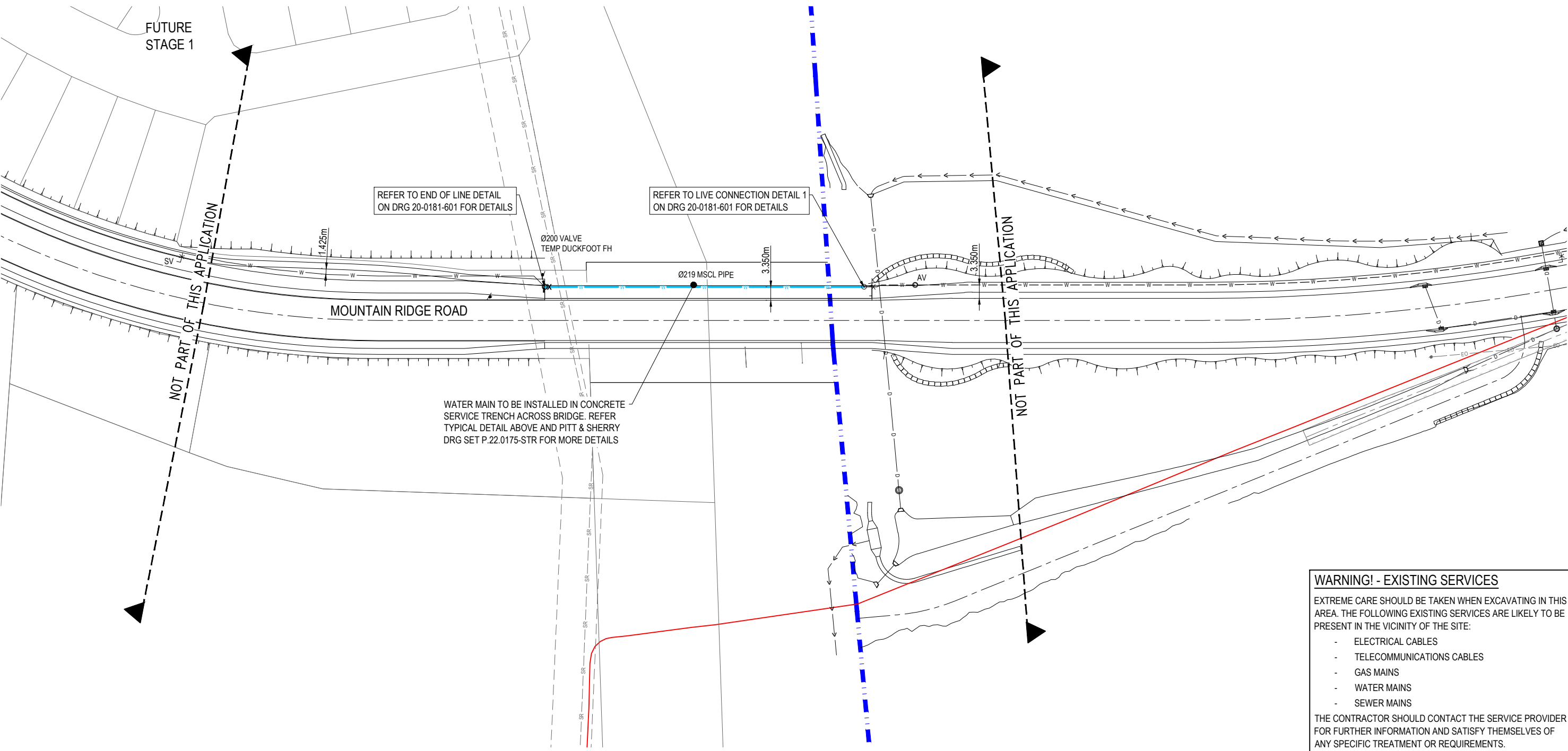


TYPICAL BRIDGE WATER MAIN CROSSING DETAIL
SCALE 1:50
NOTE: REFER TO SEQ-WAT-1312-1 FOR MORE DETAILS AND SPECIFICATIONS



- LEGEND
- PROPOSED AREA OF WORKS
 - PROPOSED WATER MAIN 219Ø MSCL
 - EXISTING WATER MAIN
 - EXISTING STORMWATER DRAINAGE PIPE
 - EXISTING SEWERAGE RISING MAIN
 - EXISTING SEWERAGE RISING MAIN
 - EXISTING TELECOMMUNICATION CABLE U/G

- WATER FITTINGS LEGEND
- PROPOSED:
- TEMPORARY DUCKFOOT FIRE HYDRANT
 - ISOLATION VALVE
 - SCOUR VALVE
 - AIR VALVE



WARNING! - EXISTING SERVICES

EXTREME CARE SHOULD BE TAKEN WHEN EXCAVATING IN THIS AREA. THE FOLLOWING EXISTING SERVICES ARE LIKELY TO BE PRESENT IN THE VICINITY OF THE SITE:

- ELECTRICAL CABLES
- TELECOMMUNICATIONS CABLES
- GAS MAINS
- WATER MAINS
- SEWER MAINS

THE CONTRACTOR SHOULD CONTACT THE SERVICE PROVIDER FOR FURTHER INFORMATION AND SATISFY THEMSELVES OF ANY SPECIFIC TREATMENT OR REQUIREMENTS.

REV	DATE	DESIGN	DRAWN	REVISION DETAILS	DRAWN	STATUS	SCALE	CLIENT	PROJECT NAME	DRAWING TITLE
A	12.09.24	BR	DH	ORIGINAL ISSUE	DH	NOT FOR CONSTRUCTION	1:500 1:1000	FRASERS PROPERTY AUSTRALIA	MOUNTAIN RIDGE ROAD UPGRADE, NEW BEITH - LOT 4	WATER RETICULATION LAYOUT PLAN
B	29.05.25	BR	DH	REVISED ISSUE	BR	APPROVED DANIEL COLLINS RPEQ 18631 DATE 29.05.25	1:50 1:100	ASSOCIATED CONSULTANT RPS GROUP (07) 3539 9500	MOUNTAIN RIDGE ROAD NEW BEITH	PROJECT No. 20-0181 DRAWING No. 602 REVISION B